



HARRY A. SPRAGUE
• • LIBRARY • •
MONTCLAIR STATE
COLLEGE
UPPER MONTCLAIR, N. J.





Digitized by the Internet Archive
in 2013

REF

LD

3780

.N3

A14

1976-

1980

C.1



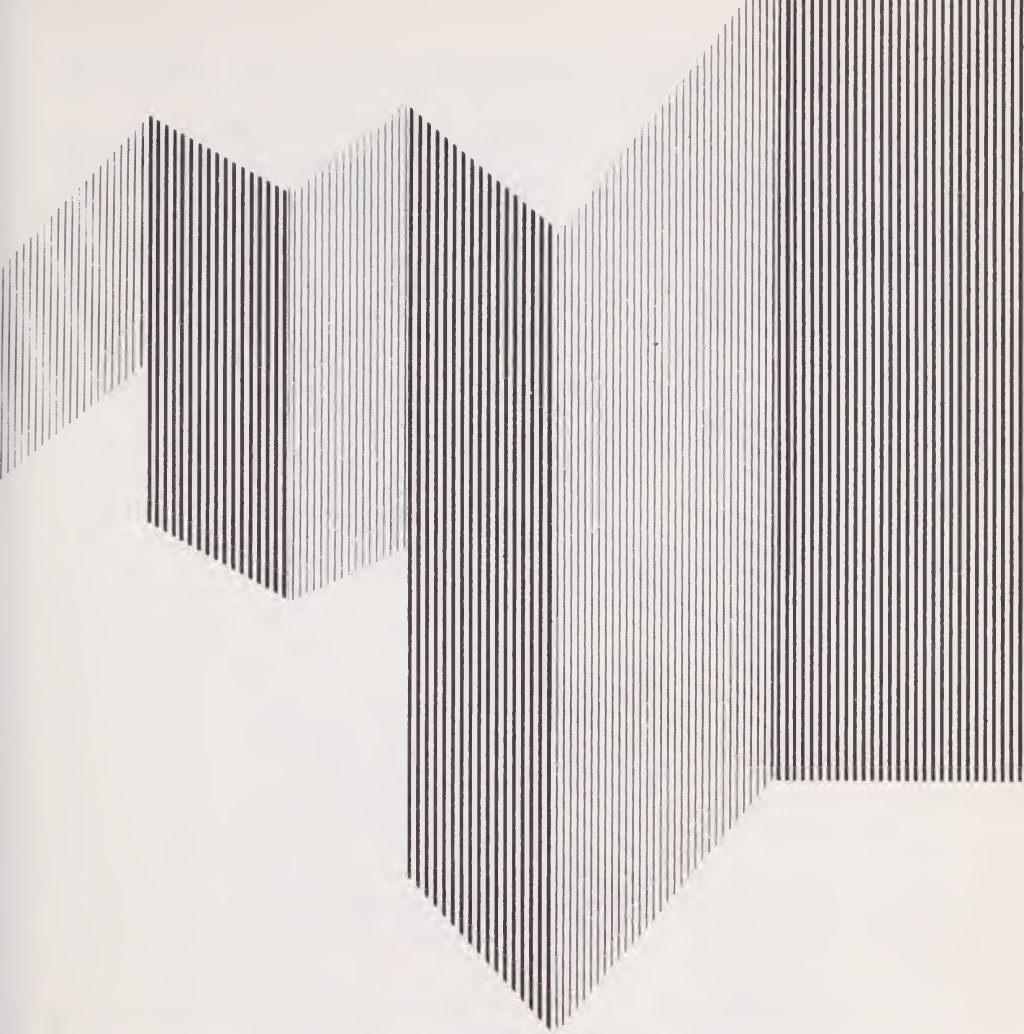
MONTCLAIR STATE COLLEGE
OF MONTCLAIR, N.J.

Graduate Catalog
1976-1978

The Graduate Catalog of Montclair State College is published biennially and presents announcements of general information, general academic regulations, and the College's academic program extant at the date of publication. The College reserves the right to change its announcements and regulations whenever such action is deemed appropriate and necessary.

Montclair State College Bulletin
Volume 69, Number 3
September, 1976

Published by the
Montclair State College Press
Upper Montclair, N.J. 07043



MONTCLAIR STATE COLLEGE
BERKELEY, MONTCLAIR, N.J.

Graduate Catalog
1976-1978

ACADEMIC COLLEGE CALENDAR FOR 1976-1978

Fall Semester — 1976

August 30-September 1	Change of Program Registration
August 30-31	In Person Evening, Weekend and Graduate Registration
September 2	Classes Begin
September 6	Labor Day — No Classes
November 25-28	Thanksgiving Recess
December 17-23	Examinations
December 24-January 2	Christmas Recess

(78 Days)

Winter Term — 1977

January 3	Classes Begin
January 21	Classes End

Spring Semester — 1977

January 17-20	Change of Program Registration
January 17-18	In Person Evening, Weekend and Graduate Registration
January 24	Classes Begin
April 4-11	Spring Recess
May 19-25	Examinations
May 29	Commencement

(82 Days)

Summer Sessions — 1977

June 7-8	Registration for both Summer Sessions
June 13	Classes Begin — 8-week session
June 27	Classes Begin — 6-week session
August 5	Classes End — both sessions
August 8-21	Steam Shutdown — entire campus

Fall Semester — 1977

August 30-September 1	Change of Program Registration
August 30-31	In Person Evening, Weekend and Graduate Registration
September 2	Classes Begin
September 5	Labor Day — No Classes
November 24-27	Thanksgiving Recess — No Classes
December 17-23	Examinations
December 24-January 1	Christmas Recess

(78 Days)

Winter Term — 1978

January 2	Classes Begin
January 20	Classes End

Spring Semester — 1978

January 16-19	Change of Program Registration
January 16-17	In Person Evening, Weekend and Graduate Registration
January 23	Classes Begin
March 20-27	Spring Recess
May 18-24	Examinations
May 28	Commencement

(82 Days)

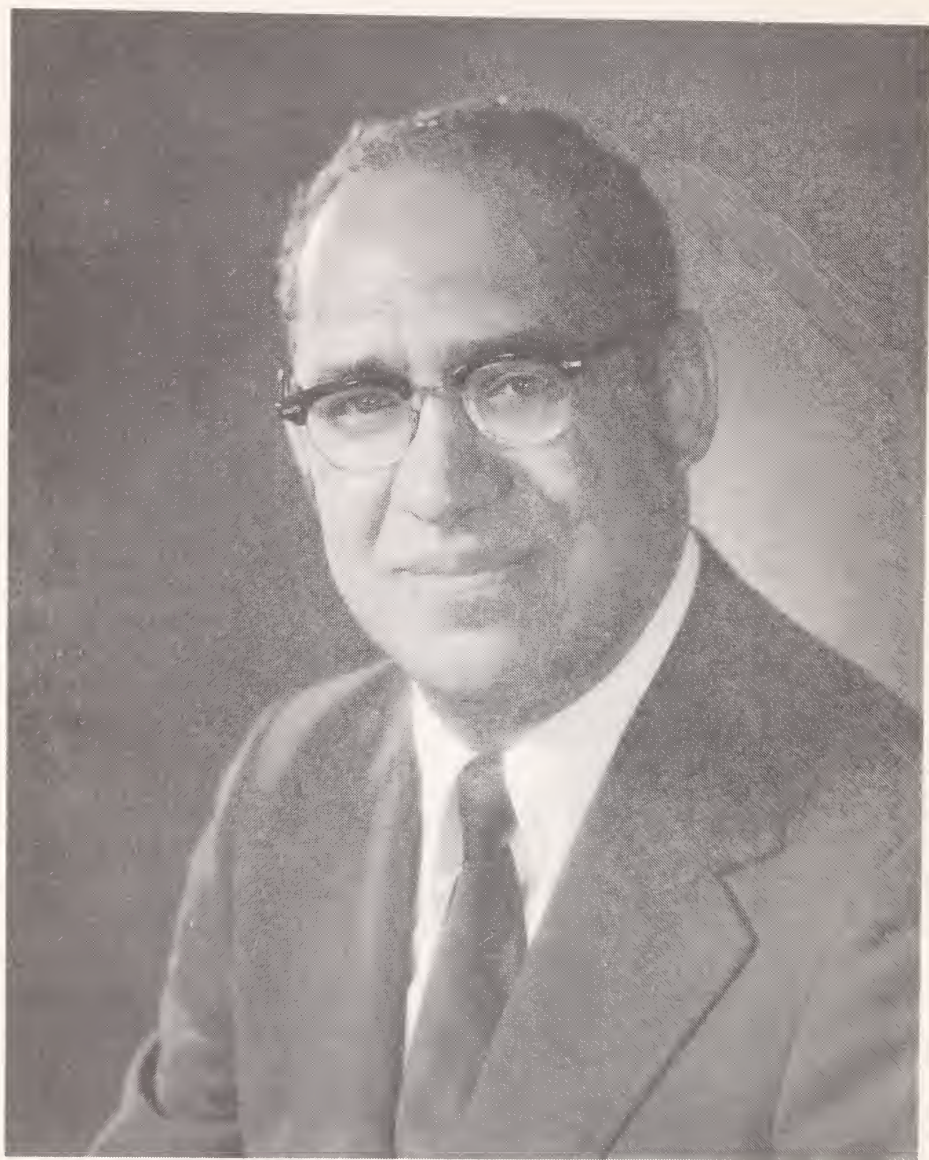
Summer Sessions — 1978

June 5-6	Registration for both Summer Sessions
June 12	Classes Begin — 8-week session
June 26	Classes Begin — 6-week session
August 4	Classes End — Both Sessions
August 5-20	Steam Shutdown — Entire Campus

THE COLLEGE RESERVES THE RIGHT TO MODIFY THIS CALENDAR

CONTENTS

3	Trustees, Officers of the College
4	Administrative Staff
5	About the College
7	General Information
9	Admission to Graduate Study
12	Academic Information
15	Graduation Requirements
16	Tuition and Fees
18	The Schools at Montclair State College
18	School of Educational and Community Services
18	School of Fine and Performing Arts
19	School of Humanities
19	School of Mathematics and Science
19	School of Professional Arts and Sciences
20	School of Social and Behavioral Sciences
21	Program Descriptions
21	Adult Continuing Education
23	Biology
29	Business and Distributive Education
33	Chemistry
36	Communication Sciences and Disorders
47	Curriculum and Teaching
54	Educational Foundations
55	Educational Leadership
66	English and Comparative Literature
71	Environmental Studies
74	Fine Arts
82	French
85	Geoscience
90	Health Professions
94	Home Economics
98	Industrial Education and Technology
102	Mathematics
109	Music
118	Physical Education
123	Psychology
134	Social Sciences
151	Spanish
155	Special Education
156	Speech and Theater
162	Student Personnel Services
168	Non-Degree Post-BA Certification
172	Post Master Technical Offerings
173	Graduate Faculty
187	Index



BOARD OF TRUSTEES

Chairman	MELVIN HAUSNER
GERALD A. LeBOFF	
Vice Chairman	W. LINCOLN HAWKINS
GLADYS C. HUNTER	
Secretary	MARY LEE JAMIESON
ERNEST M. MAY	
President of the College	HECTOR S. RODRIGUEZ
DAVID W.D. DICKSON	
	DALLAS H. TOWNSEND, JR.
	STEPHEN G. WEISS, JR.
Faculty Representative:	ROBERT DORNER
Student Representative:	LEO JACOBY

OFFICERS OF THE COLLEGE

President	Deans of the Schools
DAVID W.D. DICKSON	ERCELL I. WATSON
	School of Educational and Community Services
Vice President	DONALD M. MINTZ
for Academic Affairs	School of Fine and Performing Arts
IRWIN H. GAWLEY	
Vice President	WOLFGANG B. FLEISCHMANN
for Administration and Finance	School of Humanities
ELLIOT I. MININBERG	
	RICHARD A. LYNDE
Dean of Students	School of Mathematics and Science (Interim)
LAWTON W. BLANTON, JR.	
	HOUSTON G. ELAM
Dean of Graduate Studies	School of Professional Arts and Sciences
CARL SCHNEIDER	
	PHILIP S. COHEN
Vice Provost	School of Social and Behavioral Sciences
ROBERT MacVANE	

Administration of the Division of Graduate Studies

Dean
CARL SCHNEIDER

Assistant Dean
JERRY T. ICE

Graduate Advisors
STEPHEN D. DOBISH
SIMONE C. PICARD

ACADEMIC AND ADMINISTRATIVE SERVICES

KAYE ANDRES

Director of Second Careers Program

RAYMOND J. AST, JR.

Administrator of the Adult Continuing
Education Center

SALLY G. AYREY

Associate Registrar

CHARLES BARGERSTOCK

Director of Career Planning
and Placement

LAWTON W. BLANTON

Dean of Students

ALAN L. BUECHLER

Director of Admissions

MARSHALL A. BUTLER

Registrar

WILLIAM P. DIOGUARDI

Director of Athletics, Intramurals
and Leisure Time Activities

STEPHEN D. DOBISH

Graduate Advisor in Division
of Graduate Studies

FRANK C. ERDMAN

Assistant Director of Admissions

M. PATRICIA FRIES

Evaluator, Office of Registrar

BLANCHE HALLER

Director, Library Services

JERRY T. ICE

Assistant Dean of the
Division of Graduate Studies

WILLIAM J. KERVICK

Director of Business Services

NORMAN E. LANGE

Director of Student Teaching
and Placement

ROBERT E. MACVANE

Vice Provost, Director of
Summer Session

SIMONE C. PICARD

Graduate Advisor in Division
of Graduate Studies

RANDALL W. RICHARDS

Director of Financial Aid

CONSTANCE WALLER

Director of the Women's Center

ABOUT THE COLLEGE

Montclair State College is a publicly-supported institution of higher learning, offering programs on the master's and bachelor's degree levels to 14,000 students.

The College, founded in 1908 as a Normal School, now includes six undergraduate schools and a Division of Graduate Studies. Graduate courses were approved by the State Board of Education in 1932.

Although the College is large, its individual schools and programs are small enough to ensure intimate instruction and advisement for each student. In keeping with a liberal tradition dating from its founding, the College is open to all qualified students without restriction as to religion, national or racial origins, age or sex.

History and Governance

From 1908 through 1927, the College was a Normal School, oriented to the education of public school teachers. In 1927, it became the State Teachers College at Montclair to prepare secondary-school teachers.

In July, 1958, the College assumed its present name, Montclair State College, to reflect its stress on traditional graduate and undergraduate education in the liberal arts and sciences. Since that time, the College has placed increasingly greater emphasis on the training of future scholars, government and business administrators and managers, lawyers, physicians, dentists, scientists and researchers, journalists and writers, while maintaining its traditional excellence in secondary-school teacher education.

The New Jersey Higher Education Act of 1966 transferred governance of the College from the State Department of Education to the College's own Board of Trustees. This Board consists of nine citizens of New Jersey, appointed by the Governor of the State on the recommendation of the State Board of Higher Education, and the president of the College, ex officio. This change in governance, which took effect July 1, 1967, gave the College increased independence in the management of its own programs.

Goals of the College

Since the establishment of the College's Board of Trustees, the program offerings have been constantly expanded. Today, as a result of extensive programs on graduate and undergraduate levels, the College is a multi-purpose institution, offering a broad range of courses and programs to students with varying needs, interests and career aims.

Location

The College is located on a 200-acre campus in Upper Montclair, New Jersey, an attractive suburban community fourteen miles from midtown Manhattan.

As a result of the College's proximity to New York City, the students at Montclair State enjoy an opportunity to enrich their education through participation in the cultural, social and educational life of the metropolis of which we are part.

Financial Support

The College derives its primary income from the State of New Jersey. This basic income is supplemented by grants from government agencies and private foundations, and gifts from friends, alumni, corporations and other private philanthropic sources.

Accreditation and Memberships

The College is fully accredited by the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher

Education has granted the College full accreditation for the preparation of elementary and secondary school teachers and school service personnel.

The College is a member of the Council of Graduate Schools in the United States, the American Association of State Colleges and Universities, the American Council of Education, the New Jersey Association of Colleges and Universities and the American Association of Colleges for Teacher Education. Women graduates of the College are accepted for membership in the American Association of University Women.

College Facilities and Educational Services

Library

The Harry A. Sprague Library is centrally located on the campus. Students and faculty are encouraged to use its facilities which include carrels, study tables, group conference rooms, smoking lounges and a typing room.

A knowledgeable and helpful staff of librarians is on hand to guide students in the use of the Library's substantial reference and circulating collection of United States and New Jersey government publications. Periodicals, newspapers, books and documents in microtext are accessible through the Library's microform readers and copy machines for print and non-print materials are available at a nominal cost.

Media Center

The Center provides audio-visual materials, equipment and services for use by faculty and students for classroom instruction and presentation. The scheduling of all films for the College as well as their ordering, mailing and rental, is also handled in the Center. Student aides are provided whenever the use of equipment is requested but are also available for other services. Video taping equipment is available for use by faculty and staff, as is a closed circuit television studio with its complementary equipment. Custom graphic and photographic production services exist that include slide copy, slide duplication, transparency production and graphic design. A technical shop maintains service, and repairs all audio and visual equipment on campus. The staff of the Center is available for consultation on audio-visual problems, for demonstration of audio-visual materials and methods and for special teaching and training in the area of audio-visual education.

Student Parking Facilities

The College maintains several parking lots for use by students. These are designated on all campus maps. The College assumes no responsibility for cars or their contents while parked on College property.

Health Services

There is a registered nurse on duty in the College Health Center twenty-four hours a day, Monday through Friday. Call 893-4361. Emergency medical care is also available.

Regular office hours are from 8 a.m. to 4 p.m. After 4 p.m. this office is for emergencies only.

GENERAL INFORMATION

About the Graduate Programs

The College granted its first Master of Arts degrees to 13 students in June, 1933. In 1975 Master of Arts degrees were awarded to 836 students, of whom 335 studied in the School of Educational and Community Services, 212 in the School of Social and Behavioral Sciences, 128 in the School of Professional Arts and Sciences, 82 in the School of Mathematics and Science, 23 in the School of Humanities and 56 in the School of Fine and Performing Arts.

Division of Graduate Studies

Graduate programs at the College are organized within the Office of the Vice President for Academic Affairs into a Division of Graduate Studies. The administrative officer of the division is the Dean of Graduate Studies.

Graduate Council

The Graduate Council assists the Dean of Graduate Studies with regard to developing and administering general policies for graduate education at the College. The Dean of Graduate Studies is chairman of the Graduate Council.

Members of the Council are the Vice President for Academic Affairs, the Dean of each of the College's six schools, a faculty member and graduate student from each school, the Vice Provost, and the Director of Library Services.

Program Offerings

Each of the six schools offers programs leading to the Master of Arts degree:

SCHOOL OF EDUCATIONAL AND COMMUNITY SERVICES

- Educational Leadership (Administration and Supervision)*
- Reading
- Student Personnel Services
- Teaching (Master of Arts in Teaching)

SCHOOL OF FINE AND PERFORMING ARTS

- Fine Arts
- Music
- Speech and Theater

SCHOOL OF HUMANITIES

- English and Comparative Literature
- French
- Spanish

SCHOOL OF MATHEMATICS AND SCIENCE

- Biology
- Chemistry
- Geoscience
- Mathematics (Pure and Applied Mathematics, Computer Science, Mathematics Education)

*Sixth-year programs are offered in Educational Leadership and Psychology.

SCHOOL OF PROFESSIONAL ARTS AND SCIENCES

Business Education and Distributive Education
Environmental Studies*
Health Education
Home Economics
Industrial Education and Technology
Physical Education

SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

Communication Sciences and Disorders
Educational Psychology
Psychology**
Social Sciences

*An inter-disciplinary program including education, science and social science.

**A sixth-year program is offered within the Department of Psychology leading to the school psychologist certificate.

ADMISSION TO GRADUATE STUDY

The Division of Graduate Studies invites applications from highly-qualified graduates of baccalaureate programs in the liberal arts, the sciences, business, teacher education and other fields.

Since the number of graduate students who can be accommodated is limited, the College may admit only those applicants who demonstrate the greatest tangible promise of scholarly achievement.

A bachelor's degree from an accredited college or university in the United States or abroad is a basic requirement for admission, but is not the sole factor. Applicants must clearly demonstrate their ability to benefit from Montclair State College's programs.

Admission to a graduate degree program is restricted to applicants whose undergraduate records and scores on the Aptitude Test of the Graduate Record Examination indicate a high degree of probable success. To be admitted to a particular degree program, the applicant must be accepted by the department offering that program and approved by the Dean of the Graduate Division. Applicants should plan to take the GRE Aptitude Test as soon as possible after applying for admission.

A limited number of non-degree students will be admitted to graduate courses who, while not directly interested in pursuing any specified degree program, want to take individual courses in particular fields of study. All such applicants must present evidence of an acceptable baccalaureate degree from an approved college or university. They must also submit a request for a program of study to meet the objectives stated in the application. Admission on a non-degree basis does not in any way imply acceptance as a candidate for the Master of Arts degree.

Application for Admission into a Degree Program

An application for admission may be obtained from the Office of Admissions/Graduate. The completed application must be submitted to the office with a non-refundable fee of \$10; this fee should be sent by check or money order.

Transcripts of all previous graduate and undergraduate college study must be sent directly to the Office of Admissions/Graduate by the student's college. The applicant for a degree program should make arrangements to have an official notification of his Graduate Record Examination score sent to the Office of Admissions/Graduate.

Applications for degree programs should be on file in the Admissions Office by July 1 for Fall admission, by November 1 for admission the following Spring and by April 1 for admission in the Summer.

An applicant for a graduate degree program who has filed an application for admission may register for six semester hours of graduate work pending acceptance. Details about application procedures may be obtained from the Assistant Director of Admissions/Graduate. Questions about acceptance and registration should be addressed to the Dean of Graduate Studies. Applicants who are rejected may appeal to the Dean of Graduate Studies if they feel that they have special qualifications for acceptance while not meeting the Graduate Council Guidelines for admission to a degree program.

Application for Admission into a Non-Degree Program

An application for admission into any non-degree program may be obtained from the Office of Admissions/Graduate. The completed application must be submitted to the Admissions Office/Graduate with a non-refundable fee of \$10. A transcript indi-

cating the highest degree awarded must be sent directly to the Office of Admissions/Graduate by the student's college. The applicant must also submit a detailed statement of his program of studies and the objectives to be achieved in the graduate program at Montclair State College.

Applications including transcripts, fee payments, and statement of objectives should be on file in the Admissions Office/Graduate by July 1 for Fall admission, by November 1 for admission the following Spring and by April 1 for admission in the Summer.

Admission as a non-degree student is **not** admission into a Master of Arts degree program.

Information and advisement on all graduate programs may be obtained from the Division of Graduate Studies.

Acceptance and Conference with Advisor

After an analysis of the credentials of the applicants, those who meet the College admission requirements will be advised to confer with the graduate advisor of the department in which the applicant wishes to study. The advisor will decide whether the applicant is acceptable and will then develop an official program of study with the student for matriculation.

After the conference with the departmental advisor, the applicant will receive official notification about matriculation from the Division of Graduate Studies. Details about matriculation decisions may be obtained from the Assistant Dean or Dean of Graduate Studies.

Termination of Acceptance

Students admitted to either a degree or non-degree program must enroll for course work within one academic year or the acceptance terminates.

Admission of Veterans

Veterans seeking admission to the Division of Graduate Studies should apply to the Veterans Administration well in advance of the registration dates for a certificate of eligibility and entitlement. These forms may be obtained at the Veterans Administration office at 20 Washington Place, Newark, New Jersey.

The Veterans Administration has established certain limitations, particularly with regard to changes in courses. It therefore becomes important that the veteran clearly state his educational objectives on all appropriate forms.

To assist the veteran, to ensure that his application is in order and that the veteran has fulfilled the requirements of the GI bill, the veteran should report during registration to the Veterans' Counselor.

Foreign Applicants

Foreign applicants should obtain the Application for Admission to an Educational Institution in the United States from the Office of Admissions/Graduate, and return the completed form to the office at least one month prior to the normal deadline.

As proficiency in spoken and written English is prerequisite to graduate study at Montclair State College, the College requires foreign applicants for whom English is not a native language to take the Test of English as a Foreign Language, administered worldwide by the Educational Testing Service of Princeton, New Jersey. Scores from the Test of English as a Foreign Language should reach the Office of Admissions/Graduate no later than the normal deadline.

Senior-Graduate Students

Montclair State College undergraduates with academic averages of at least 2.67, who are within 16 semester hours of graduation, may take up to six semester hours of graduate work.

In order to be eligible to take graduate courses, a qualified senior must complete the appropriate application, which is available in the Division of Graduate Studies Office. This application must be approved by the registrar, the chairman of the graduate department in which the student wishes to study and the Dean of Graduate Studies.

Qualified undergraduates taking Senior-Graduate courses for graduate credit must pay appropriate fees and tuition at the regular graduate student rates. Admission of an undergraduate to Senior-Graduate courses does not imply future acceptance into a graduate degree program.



ACADEMIC INFORMATION

Academic Policies

Course Load

Full-time students in residence must register for 12 credit hours each semester. Part-time graduate students who are employed on a full-time basis may not register for more than nine semester hours of credit a semester, including summer sessions.

The Division of Graduate Studies recommends that the part-time student take no more than six semester hours of course work in any one semester.

Course Numbers

Most courses numbered from 400 through 499 are senior-graduate courses. They may be taken for graduate credit only with permission of the graduate faculty advisor in the student's major department and only to the extent approved by regulations of the Division of Graduate Studies. At this time, no more than 25 percent of courses offered for the Master of Arts degree may be courses numbered from 400 through 499. Courses numbered below 400 are not acceptable for graduate credit.

Courses numbered 500 and above are open only to graduate students.

Restrictions for Graduate Credit

No credit is granted toward the Master of Arts Degree for certain 400-level courses which are required for initial certification.

Courses taken ten or more years prior to the date of the student's matriculation will not be accepted for credit toward the Master of Arts degree. Grades below B are not accepted for transfer credits.

No more than six semester hours of credit may be allowed for courses completed at Montclair prior to matriculation for the Master of Arts degree, except in specially-designated programs.

No graduate credit is allowed for courses taken at other colleges while the student is enrolled at Montclair State College unless the student obtains prior approval from the Dean of Graduate Studies to undertake such courses at other institutions.

Credit is not allowed for courses taken on an audit basis.

It is the obligation of each student to ensure that each course undertaken for graduate credit does not duplicate a course previously taken by that student. Courses may not be taken more than once for credit regardless of any change in the course number or title. Students are particularly cautioned to be careful with regard to courses that have been updated, where course numbers or titles may have changed; these courses may not be counted more than once.

Transfer Credit

A graduate of an accredited college or university may transfer six semester hours of graduate credit toward the Master of Arts degree at Montclair State College, provided the student obtains approval from his departmental graduate advisor and from the Dean of Graduate Studies. A form for this purpose is available in the Division of Graduate Studies. This form should be completed well in advance of the date the transfer credit is needed.

Time Limit

Work for the Master of Arts degree must be completed within six years from the date of matriculation, unless the Dean of Graduate Studies approves an extension.

Applications for extension will be reviewed and evaluated by the Dean of Graduate Studies on the basis of the student's progress toward the degree and in accordance with established graduate policy at the time of application.

Grades and Standards

There are eight grades used at Montclair State College:

A — Excellent	F — Failure
B — Good	INC — Incomplete
C — Fair	WD — Withdrew
D — Poor	NC — No Credit

No graduate credit is allowed for courses completed with grades below "C." In order to qualify for the Master of Arts degree, a student must present a grade point average of 3.00.

The mark "F" signifies: (1) academic failure; (2) failure of the student to submit written notice of withdrawal, or (3) withdrawal after the midpoint in the semester. The mark "WD" is given to those who submit in writing to the Office of the Registrar their intention of withdrawing from a course **before** the midpoint of a semester.

The mark "INC" indicates that a student, due to illness, was unable to complete the work by the end of a semester. Course work for "INC" grades received in the Fall semester must be completed by the end of the Spring semester and work for Spring and Summer "INC" grades must be completed by the end of the Fall semester. Failure of the student to complete the assigned course work by the given date will result in a final grade of "F." Deadlines are adjusted for courses which meet for more or less than a full semester. Students may repeat a grade of "D" or "F" with the approval of the Dean of Graduate Studies.

Any matriculated student whose grades fall below the required "B" average will be placed on academic probation and will be given one semester, within one year from date of first notification of probationary status, to achieve the required average. Failure to achieve the required average within the prescribed period of time leads to final review which may result in the removal of the matriculated status. In cases of written appeals, such appeals must be acted on by the Dean of Graduate Studies.

An official record of credits and grades earned will be mailed to the student following the close of each semester.

The Dean of Graduate Studies and the student's graduate faculty advisor may, for good reason, recommend to the Vice President for Academic Affairs that a student's matriculation status be revoked. Such recommendation will be made for students found deficient in personality, integrity, temperament, emotional adjustment or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

Registration Procedure

All graduate students who were registered at Montclair State College during a semester will receive registration materials for the next semester by mail. New students who apply after the cut-off date for mail registration, or students not registered in the previous semester, must register in person.

Details about registration procedures may be obtained from the Office of the Registrar.

Changes of Courses

Students should not change their planned course programs without approval of the departmental graduate advisor. Appropriate forms are available in the Division of Graduate Studies.

Withdrawal from a Course

A written notice to the Office of the Registrar is required for withdrawal from a course. An acknowledgement will be sent to the student following receipt of the written notice of withdrawal.

Withdrawal from courses that meet more than or less than a full semester is allowed until the midpoint of the course.

Refunds are computed from the date of receipt of the written notice of withdrawal in the Office of the Registrar.

Students who do not submit written notices will receive the grade of "F" in those courses which they cease to attend. Students who withdraw after the midpoint will also receive an automatic "F" grade.

Students are cautioned that notification to the instructor does not constitute an official withdrawal.

Cancellation of Courses

The College reserves the right to cancel any course for which enrollment is insufficient. In that event, students from the cancelled class may register for another course or receive a refund of tuition. This authorization to register for another course does not exempt a student from meeting the stated prerequisites for admission to that alternate class, or from the official program of study.

Change of Degree Program

A student transferring from one degree program to another must complete a Change of Program Form, which may be obtained from the Division of Graduate Studies. This form must be signed by the departmental graduate advisors from the student's present department and from the department the student desires to enter, and must also be signed by the Dean of Graduate Studies.

Following approval of the application to change a degree program, a new official program of studies will be worked out with the student. Students are cautioned that all previously completed course work may not necessarily be approved for transfer to the new program. Students who change programs are governed by the six-year completion of requirements rule from the date of matriculation for the first degree program.

Master's Degree Credit

Each student assumes responsibility for assuring that he completes the proper courses for his program needs. Students should bring to each registration period their official work programs as well as transcripts of graduate work already completed, in order to avoid taking courses which cannot be counted toward the Master of Arts degree in the student's field.

State Certification Requirements

State certification requirements are subject to change without notice. Students are advised to consult advisors for accurate and current information.

Graduation Requirements

Minimum Number of Semester Hours

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies in the applicant's undergraduate record. A minimum of thirty-two semester hours plus student teaching is required in the program with a major in teaching. A minimum of sixty semester hours is required for certification in the School Psychology Program.

Thesis

Four of the total credits can be satisfied by a thesis which meets the approval of the faculty graduate advisor and the Dean of Graduate Studies.

A department may accept the Master's Thesis as equivalent to the required seminar, and/or in lieu of all or part of the final comprehensive examination. A student writing a thesis must register for the course, Departmental 600, Master's Thesis, for four semester hours.

The student is expected to complete the thesis within one calendar year. An extension of time may be granted by the Dean of Graduate Studies after consultation with the student's advisor. If granted, the student must re-register for Departmental 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months. The thesis must be submitted six weeks prior to commencement. A copy must be submitted to the Dean of Graduate Studies for final acceptance.

Comprehensive Examination

The examination is usually given twice a year, once in October and once in March. It is the student's responsibility to file the Notification for Comprehensive Examination Form with the graduate advisor. The form is available in the Division of Graduate Studies office. This procedure should be completed at least six weeks prior to the examination date. Students who fail the departmental comprehensive examination are permitted to retake it twice.

Students should check with their departmental graduate advisors to determine the dates on which the comprehensive examinations will be offered.

Application for Final Evaluation

The application form is obtained in the Office of the Registrar by the candidate anticipating the completion of the degree and/or post-B.A. certification requirements. Responsibility for making application rests with the candidate.

This form must be completed and returned by March 1 for August conferment, by June 1 for January conferment, and by October 1 for June conferment.

Students should check with advisors concerning final examination dates and other details involved in graduation procedures.

Commencement

Commencement exercises are held each Spring.

Students who meet the scholastic requirements for their degrees and who have fulfilled all obligations to the College in January, June or August will be awarded diplomas.

Participation in the commencement by June graduates is expected unless a request for conferment in absentia is approved by the Dean of Graduate Studies prior to the date of commencement. January and August graduates are also invited to attend the exercises.

TUITION AND FEES*

Tuition Charge

Graduate tuition, for those students who hold at least a bachelor's degree, per semester hour of credit.....	(in state)	\$45.00
	(out of state)	65.00

Fees (Non-refundable)

Registration fee, paid each time a student registers	2.00
Student Center Building fee, paid each time a student registers.....	2.00
per semester hour to a maximum of	22.00
Student Service fee, paid each time a student registers	1.50
per semester hour to a maximum of	17.50
Late registration fee, for all students who register after the regular registration period	5.00
Change of Class Schedule fee, for students who after their initial registration each semester, make a change or changes in their original class schedule other than withdrawal from a course.....	10.00

Application Fee

Each application for admission must be accompanied by a non-refundable application fee of.....10.00

Transcript Fee

For each copy of a student's transcript	1.00
Inquiries about procedures for requesting transcripts should be directed to the Registrar	

Payment Instructions

All checks should be made payable to: Montclair State College

Refunding of Fees

Refunds are made under circumstances detailed below if a student officially withdraws from a class by filing a written application with the Division of Graduate Studies.*

The following schedule of refunds has been established by the New Jersey state colleges:

Period of Withdrawal	Percent Refunded
Before courses begin	90%
During first third of course	50%
After first third of course	None

The percentage of refund is based on the total obligation. Tuition and service charges are refunded in full if classes are discontinued by the College.

In computing refunds, the date of withdrawal is the date on which the written notice of withdrawal is received in the Office of the Registrar.

*Subject to change at any time by action of the New Jersey Board of Higher Education.

Financial Assistance

Graduate Teaching Assistantships

There are usually a very limited number of teaching assistantships available in some of the instructional departments to qualified graduate students. Applications should be requested from the Division of Graduate Studies or the appropriate department.

Opportunities for Part-Time Employment

Montclair State College, through its Career Services Office, offers opportunities for students who desire off-campus part-time work after school, weekends and during vacations. The employment service does not guarantee jobs but there is no scarcity of opportunities.

Additional opportunities are available on campus for students to earn income as laboratory or dormitory assistants, secretarial and clerical assistants, or tutors. Further information on these positions may be obtained from the Financial Aid Office.

National Direct Student Loan Program

To be eligible for a loan, an applicant must be a citizen or national of the United States, or must have such immigration status and personal plans as to indicate that he is in the United States for other than a temporary purpose. Therefore, persons who are in this country on such visas as an "F" student visa or a visitor's visa, are not eligible.

The applicant must be a full-time college student on the graduate level in an institution of higher education participating in the National Direct Student Loan Program or be accepted for admission as a full-time student in such an institution.

The maximum a student may borrow depends upon the government's appropriation and number of applicants. The borrower must sign a note for his loan.

The interest rate on these loans is three percent per year. Interest begins nine months after the student ends his full-time studies. The first payment is due nine months after the end of the student's full-time studies, with some exceptions. The National Direct Student Loan Act provides that repayments are to be completed according to the repayment schedule. The above program is subject to change by the Department of Health, Education and Welfare.

New Jersey State Student Loan Program

Loans are made by any participating banking or savings and loan institution in the state. Loans are guaranteed by the New Jersey Higher Education Assistance Authority.

A list of banks participating in this program may be obtained from the New Jersey Higher Education Assistance Authority or the College's financial aid advisor.

Maximum loan: Each graduate year — \$2,500.

Total loans including graduate may not exceed \$10,000.

Loan applicants must follow all procedures in effect at the time of the application.

THE SCHOOLS AT MONTCLAIR STATE COLLEGE

The 36 departments of academic instruction at the College are organized into six Schools, each headed by its own Dean. Graduate instruction is under the direction of the Dean of Graduate Studies.

School of Educational and Community Services

Ercell I. Watson, Dean

The School of Educational and Community Services exists to provide professional educational services to the communities of the nation and particularly those of northern New Jersey. The specific components of society to which these services are directed are the individuals seeking admission to the teaching profession or preparation for areas of specialization or growth within the profession; public school systems; non-public schools; community agencies and business and industrial organizations. It is also concerned with the continuing development of the general field of education and those problems of society which are related to it.

The general role of the School is three-fold: (1) to make these services available in a manner which will be most accessible and useful to the recipients, (2) to utilize to the best advantage the training, experience and expertise of the staff in the performance of those services and (3) to act as a coordinating agency in working with other agencies of the College and community in mutual efforts of service. The general means of performing these services will be those of instruction, consultation, supervised laboratory experiences and research.

Current graduate programs in the School are designed to meet one or more of six needs: (1) instruction in Administration and Supervision (Educational Leadership) leading to the Master of Arts degree and New Jersey certification for positions of Supervisor, Principal or School Administrator; (2) instruction in the Student Personnel Services, including School Social Worker (Visiting Teacher) leading to the Master of Arts degree and a New Jersey certification in guidance and/or school social work; (3) Master of Arts with a major in education to prepare liberal arts college graduates for teacher certification combined with further graduate study; (4) Master of Arts in Reading, leading to reading specialist certification, and (5) advanced professional instruction for administrators, supervisors, counselors, and (5) advanced professional instruction for administrators, supervisors, counselors, classroom teachers and other personnel involved in educational pursuits.

Each of the areas within the field of education are listed separately. Students who are not candidates for a degree may elect any courses except those for which they may not have the necessary prerequisites or which are restricted to candidates in the field of specialization. Courses at the sixth year level are available in Educational Leadership (Administration and Supervision).

School of Fine and Performing Arts

Donald M. Mintz, Dean

The School of Fine and Performing Arts consists of the departments of fine arts, music, and speech and theater. Each offers preparation for careers in its disciplines, in public school teaching, and in public service and managerial professions associated with the arts.

Separately and together, the departments offer courses that recognize significant contemporary developments: the increased role of technology in artistic enterprise, the growth of film and television as artistic media, the tendency toward blurring of the boundaries between conventional artistic disciplines, and serious challenges to traditional notions of what art is.

Because Montclair is close to New York City, students are able to take advantage of the city's unrivaled cultural and artistic resources.

School of Humanities

Wolfgang B. Fleischmann, Dean

The School of Humanities offers graduate work toward the Master of Arts degree in English and comparative literature, French language and literature and the literature of Spain and Spanish America.

The School is attractively housed in Partridge Hall, a new classroom and faculty office facility.

All graduate courses and curricula in the School of Humanities are under continual revision by a committee, chaired by the Dean of the School.

School of Mathematics and Science

Richard A. Lynde, Interim Dean

The School of Mathematics and Science includes the departments of biology, chemistry, mathematics, and physics-geoscience. Graduate programs are offered in the areas of biology, chemistry, mathematics and geoscience.

Graduate programs in the sciences and mathematics were introduced in the College over thirty-five years ago. The two areas are dynamic and continuously increasing in complexity.

The School is located in portions of Finley and Mallory Halls and in the new Mathematics and Science building, which houses the departments of chemistry, mathematics and physics.

The College is a charter member of the New Jersey Marine Sciences Consortium. Certain of the courses, listed in the departments of biology and physics-geoscience, are given at the facilities of the Consortium.

School of Professional Arts and Sciences

Houston G. Elam, Dean

Michael A. Puglisi, Associate Dean

Courses offered by the School provide a wide range of knowledge opportunities which, if elected carefully, result not only in a broadening of professional competence, but also in an improved life style.

Graduate programs in the School of Professional Arts and Sciences are offered to accomplish several objectives:

1. To increase one's knowledge within a specialized professional area improving job mobility and promotional opportunities.
2. To provide an opportunity for candidates to earn an advanced degree and obtain improved professional credentials.

3. To provide the opportunity for promoting professional skills outside one's area of major competence.

Graduate programs within the School are structured to result in the awarding of a Master of Arts degree in (1) Business or Distributive Education, (2) Environmental Studies, (3) Health Education, (4) Home Economics, (5) Industrial Education and Technology and (6) Physical Education.

School of Social and Behavioral Sciences

Philip S. Cohen, Dean

Graduate programs in the School of Social and Behavioral Sciences are designed to accomplish four objectives.

1. To provide the opportunity for students to acquire advanced knowledge in one of the major areas of the social or behavioral sciences.

2. To acquaint the student with the inter-relatedness of the various fields within the social and behavioral sciences as well as their relationship to other disciplines.

3. To familiarize students with the particular methodology and problems of his or her field.

4. To provide students with the background to do creative and independent work both during and after their graduate careers.

Specifically, graduate programs are available in (1) Social Sciences, (2) History, (3) Psychology and (4) Communication Sciences and Disorders.

The social sciences and history comprise a number of disciplines, the boundaries of which are constantly changing and expanding. At the same time, research within the disciplines is becoming more specialized. The necessity for constant study, therefore, presses upon everyone involved in the social sciences whether he or she is teaching or working in government, industry or the helping professions.

The departments within the School of Social and Behavioral Sciences provide programs of an advanced character which reflect sound developments in scholarship in various fields. They also offer advanced courses for teachers who wish to improve their preparedness for specialized secondary school subjects. Finally, they aim to provide for the teacher an opportunity for keeping informed about changing techniques and problems related to teaching the social studies. Selections from advanced courses lead to the Master's degree in history or the social sciences, with concentration in a particular field.

The psychology department offers programs of a distinctly professional nature as well as those which are preparatory for more advanced degrees.

The graduate program in speech, language and hearing rehabilitation leads to increased skills and qualifications as a therapist in public schools or in special institutions, such as hospitals, and to completion of the requirements for certification in the State of New Jersey and in the American Speech and Hearing Association.

ADULT CONTINUING EDUCATION

Chairman: Mr. Raymond Ast

The Department of Adult Continuing Education provides program services to students, volunteer groups, instructors, counselors, supervisors, administrators and others in communities and agencies throughout New Jersey and the nation. The programs offer direct service to community education development efforts for adult educators, training programs for industrial and institutional employee career mobility, adult basic education and high school completion programs and teachers, continuing education unit technical assistance, and selected contractual consultant and service assistance. The Department utilizes College and community resources in the development of programs serving older adults, as well as the development of pre-retirement planning programs. Information dissemination of adult and community education materials and resources is made available. Graduate credit courses are offered in adult and community education for individuals entering the field or seeking professional advancement.

Course Descriptions

0807-460 Methods and Techniques in Teaching the Adult 3 sh

This course is designed to increase undergraduate and graduate student professional competence as an adult educator through the development of his knowledge and understanding of current theory and teaching techniques in the field of adult basic education.

0807-550 Historic and Philosophic Development of Adult Continuing Education 3 sh

The identification of selective historic, philosophic, and sociological backgrounds upon which a foundation for present-day adult continuing education organizational structures in the U.S. are to be developed. An historic perspective will be utilized to provide opportunity for the student to develop his own philosophic base of adult continuing education leadership role as a practicing educator.

0807-552 Community and Educational Program Development in Adult Continuing Education 3 sh

A course designed to provide experiences for the student to translate the social, physical, intellectual, and psychological patterns and needs of the adult learner into learning objectives applicable to program development in a community. Curricular materials and techniques will be developed and applied to the individualized programs of the various community and educational agencies involved in adult education.

0807-553 Administration and Supervision of Adult Continuing Education 3 sh

This course considers the various administrative and supervisory roles in directing a program in Adult Continuing Education. Particular attention will be given to an analysis and application of the technical, human relation and conceptual skills of administration to problems identified in Adult Continuing Education.

0807-554 The Role of the Para-professional and Volunteer in Adult Continuing Education 3 sh

A course designed to enable the professional to understand and utilize para-professionals and volunteers in a variety of educational and agency programs including community programs, neighborhood organizations, anti-poverty programs, and

schools. Such roles include: counselor and family aides, clerical aides, library aides, AV aides, tutors and teacher aides. An emphasis will also be given to preparing and training para-professionals and volunteers for career ladder positions in adult continuing education.

0807-556 Organization and Development of a Community Education Program 3 sh

This course is designed to develop an awareness of the community education concept and to provide skills and strategies for educational and community leaders in promoting and implementing community education.

0807-559 Seminar and Practicum in Adult Continuing Education 3 sh

Awareness and skills in the teaching of adults with particular attention to working with the educationally disadvantaged young and older adult through lecture, discussion, demonstration, and practicum experience.

0807-650 Interdisciplinary Seminar in Adult Continuing Education 3 sh

The seminar considers such problem areas as values, communications, personality, perception, and organization. With problems basic to adult continuing education as its focus, the seminar brings together in a systematic fashion the pertinent knowledge, learnings, skills of appropriate related disciplines such as Psychology, Anthropology, Economics, Political Science, Sociology, and the Humanities.

0807-651 Independent Study in Adult Continuing Education 3 sh

A course designed for individuals who in consultation with an advisor wish to undertake either an indepth analysis of a specific problem, or to design and implement a particular project in adult continuing education.



BIOLOGY

Graduate Advisor: Dr. Leah Koditschek

Department Chairman: Dr. Paul P. Shubeck

The graduate programs in the biology department are designed to enable a student to develop his or her preparation for a career in biological fields requiring advanced training or for the teaching profession.

Admission Requirements

Prior to matriculation for the Master of Arts degree in biology, the student should have completed a subject matter of at least twenty-four semester hours in biology and have adequate preparation in college chemistry, mathematics and physics.

In cases where there has been a weak undergraduate program in the major and/or collateral fields, prerequisite courses, which will not count towards graduate credit, may be assigned.

Students in the teaching fields may use six semester hours of approved electives for the selection of graduate courses in the area of professional education.

The work program of the student is prepared in cooperation with the biology graduate advisor. Any changes in the program can be made only with the written approval of the graduate advisor. The student should keep the advisor informed of his/her progress in the program.

Requirements for the Master of Arts Degree in Biology

- I. Specialization22-26 semester hours
 - A. The candidate must complete the research requirement by taking one of the alternatives listed below:
 1. Master's Thesis.....Credit by arrangement
 2. 0401-514 Biological Problems of Society3
 - B. The candidate must complete a minimum of 16 semester hours within the biology department at the Upper Montclair campus.
- II. Approved Electives.....6-10 semester hours
- III. Comprehensive Examination

Minimum: 32 semester hours

Course Descriptions

0401-510 The Teaching of Biology in Secondary Schools 3 sh

Seminar and research course designed for study of methods and practices being used in teaching of secondary school biology.

Prerequisite: 16 semester hours in biology

0401-511 Histology and Histological Techniques 4 sh

Structural characteristics of cells and their specialization according to function; the organization of cells into the tissues and organs of the intact form; basic procedures for the preparation of tissue sections and permanent mounts (2 hours lecture, 4 hours laboratory).

Prerequisite: 8 semester hours in biology

0401-512 Advanced Genetics**3 sh**

Seminar course. Genetics of microorganisms, molecular genetics, developmental genetics, non-nuclear genetic phenomena.

Prerequisites: 1 semester Biochemistry 1401-412; Genetics

0499-513 Instrumentation and Techniques for Biological Science**4 sh**

Modern analytical and research techniques in biology, including manometry, spectrophotometry, electrophoresis, chromatography, microbial batch growth and assay techniques, immunotechniques and evaluation of experimental design and data (2 hours lecture, 4 hours laboratory).

Prerequisites: General chemistry, general physics, organic chemistry and an adequate background in biology or permission of the staff. Analytical chemistry or biochemistry desirable.

0401-514 Biological Problems of Society**2 sh**

Seminar. Students will investigate and discuss environmental problems reported in recent scientific publications.

Prerequisite: Matriculation for M.A. degree in biology or permission of instructor. Comprehensive examination for the Master's degree in biology will be based on this course.

0401-515 Radiation Biology**4 sh**

The biologic effects of ionizing radiations (2 hours lecture, 4 hours laboratory).

Prerequisite: 20 credits of biology. One year of physics recommended.

0401-516 Biogeography**3 sh**

Distribution of plants and animals of the world on continents and continental and oceanic islands and in various climatic zones.

Prerequisites: 8 semester hours botany; 8 semester hours zoology, including vertebrate zoology; 3 semester hours physical geography.

0401-520 Plant Physiology**4 sh**

Investigation of physiology of plants. Plant growth, development and reproduction as well as the new advances in plant physiology. Water relations of plants, mineral nutrition, physiological significance of soil and soil moisture, photosynthesis, respiration, plant biosynthesis and dynamics of growth (2 hours lecture, 4 hours laboratory).

Prerequisite: Organic chemistry, general botany or permission of the instructor.

0401-521 Field Studies of Flowering Plants**4 sh**

The taxonomy, evolutionary trends and ecological adaptations of the Gymnosperms and Angiosperms. A variety of habitats will be visited and analyzed (2 hours lecture, 4 hours laboratory).

Prerequisite: 1 year of botany and field experience in ecology.

0401-522 Plant Pathology**3 sh**

Causes, symptoms, impact on man's food supply and control of plant diseases.

Prerequisites: Microbiology, 1 year Botany or approval of instructor (2 hours lecture, 2 hours laboratory).

0401-523 Mycology**3 sh**

Identification, classification of fungi and their place in the ecosystem (2 hours lecture, 2 hours laboratory).

Prerequisite: Microbiology, 1 year of Botany or approval of instructor.

0401-530 Animal Behavior**4 sh**

Patterns and mechanisms of behavioral responses to changes in the internal and external environments. Among the topics considered are orientation, reproduction, communication, development and behavior genetics (2 hours lecture, 4 hours laboratory). Prerequisites: 16 semester hours in Zoology *or* a course in each of the following: One year of Zoology, Comparative Psychology and Physiological Psychology. Spring only.

0401-531 Parasitology**3 sh**

General biology, ecology and classification of medically important protozoans and helminths (2 hours lecture, 2 hours laboratory).

Prerequisite: General Zoology

0401-532 Insect Ecology and Behavior**3 sh**

This course considers (1) the relationship of insects to their environment, (2) insect populations, (3) insect behavior. Insects are said to make up "The Rival World" of man. This being the case, it behooves man to explore how insects react to our mutual environment, how insect populations fluctuate, and how insects behave.

Prerequisite: A course in general entomology.

0401-540 Comparative Human Anatomy**4 sh**

Man's physical, physiological and behavioral aspects in the framework and by the methodological approach of comparative anatomy (2 hours lecture, 4 hours laboratory).

Prerequisite: A year course in general zoology and a course in human anatomy and physiology.

0401-541, 542 Experimental Embryology and Cellular Differentiation I, II**2 sh**

Seminar on experimental studies that have led to present knowledge of developmental processes. Discussion of studies by classical embryologists with emphasis on relevance of their ideas to modern concepts of development. Special topics of embryology; regulative vs. mosaic development, induction, morphogenetic movement, fields and gradients. Modern techniques and studies: nuclear transplantation, chromosome differentiation, in vitro studies of cell disaggregation and reaggregation.

Prerequisite: Basic Embryology; One course each in General Biology or Zoology.

0401-543 Comparative Immunology**3 sh**

The phylogeny and investigation of immune defense mechanisms (2 hours lecture and 2 hours laboratory).

Prerequisites: Bachelor's degree in Biology; Immunology, 8 hours of chemistry, or permission of the instructor.

0401-544 Comparative Animal Physiology**4 sh**

The physiological mechanisms involved in the varied responses of both vertebrates and invertebrates to critical fluctuations of their physico-chemical environment (3 hours lecture, 3 hours laboratory).

Prerequisites: Degree in biology, including Cell Biology, General (or Human) Physiology, and one year of Zoology.

0401-545 Experimental Endocrinology**3 sh**

A seminar and laboratory course in endocrinology in which the various endocrine glands will be surgically removed or chemically destroyed and the morphologic and physiological effects measured and observed.

Prerequisites: 0401:446 Endocrinology, or 0401:442 Human Physiology, or the equivalent.

0401-550 Topics in Microbiology 4 sh

Selected topics in microbiology of special interest from both theoretical and technological point of view, such as, microbial metabolism, microbial cell-free systems, genetics, antibiotic action, bacteriophage, virus and cancer, etc.

Required: General Microbiology, Organic Chemistry, Cell Biology. Also desirable: Intermediary Metabolism and Advanced Microbiology.

0401-551 Intermediary Metabolism I 2 sh

Discussion of interrelationships of catabolic and anabolic paths.

Prerequisites: One year of Organic Chemistry and Biology; Biochemistry or Cell Physiology or equivalent.

0401-552 Intermediary Metabolism II 2 sh

Biological cycles, unity and diversity in metabolic paths, metabolic evolution, metabolic control mechanisms and other special topics.

Prerequisite: Intermediary Metabolism I or equivalent.

0401-553 Microbial Ecology 4 sh

Exploration of the essential role of microorganisms in the eco-system. Lecture, field trips and laboratory will demonstrate the ubiquitous and highly adaptive evolution of microorganisms, their inter-relationships and their profound influence on the biosphere (3 hours lecture, 3 hours laboratory).

Prerequisites: General Botany, General Chemistry, Elementary Microbiology or Mycology.

0401-570 Ecology 3 sh

Basic ecological principles and concepts. Habitat approach to field exercises in fresh water and terrestrial ecology. Intra and interspecific relationships with all living members of the ecosystem; problems in plant and animal ecology and appropriate research in the field and library (2 hours lecture, 2 hours laboratory).

Prerequisite: General Botany, General Zoology, Plant Taxonomy or equivalent, some physical science.

0401-571 Physiological Plant Ecology 4 sh

Field and laboratory studies including methods of vegetation analysis with emphasis on autoecological techniques (2 hours lecture, 4 hours laboratory).

Prerequisite: Ecology, New Jersey Flora or equivalent, or permission of the instructor.

0401-572 Ecology of the Estuary 4 sh

Important biotic, chemical and physical parameters of New Jersey's estuaries. Evolution and successional trends of estuarine communities. Ecology of individual communities studied by field trips to Delaware Bay shore and to some Atlantic coast bays, marshes and offshore barrier islands. Also offered at the New Jersey Marine Sciences Consortium (2 hours lecture, 3 hours laboratory).

Prerequisites: Invertebrate Zoology, Plant Kingdom, one year of Chemistry, or permission of the Instructor.

1401-573 Benthic Ecology 4 sh

Community structure, trophic dynamics, species diversity and distribution of bottom dwelling organisms in relationship to their environment, lectures, laboratory work and field investigations of the marine benthos (1 hour lecture, 6 hours laboratory).

Prerequisites: Invertebrate Zoology, Plant Kingdom, degree in Biology or consent of the Instructor.

1401-574 Tidal Marsh Ecology **4 sh**

Salt marsh development and physiography; community structure, energetics and inter-relationships. The role of salt marshes in estuarine and marine systems. The impact of man on the marsh (2 hours lecture, 4 hours laboratory). Offered at the New Jersey Marine Sciences Consortium Field Station.

Prerequisites: Degree in biology including some course work in marine biology.

0401-600 Research in Biology **Credits by approval**

This course is designed to encourage supervised graduate research in a well-defined area of Biology.

Prerequisites: Approval of Department Chairman and Graduate Advisor, as well as Faculty Sponsor who will supervise research.

0499-505 Bacteriological Techniques in Marine Sampling **2 sh**

Standard methods of bacteriological water analysis, including MPN and membrane filtration. Special problems relating to sampling and analysis of marine sediments, surface and subsurface marine waters.

Prerequisites: General Biology, General Chemistry, Microbiology.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Descriptions of the following courses will be found in the current undergraduate bulletin.

0499-401	Field Methods in Oceanography & Marine Biology	1
0499-402	Plankton Sampling and Analysis	1
0499-403	Primary Production in the Marine Environment	1
	Techniques and Measurement	1
0499-404	Plant and Animal Histological Techniques	3
0401-409	Field Experiences in Current Lab Research	Credit by Arrangement
0401-410	Biological Sciences Demonstrations	4
1401-411	Introduction to Electron Microscopy	4
1401-412	Genetics	4
1401-413	Field Studies in Sciences: Biology	2
1401-414	Problems in Field Studies in Biology	2
1401-415-416	Modern Biology	each 4
1401-417	Research Seminar in Biological Literature	2
1401-418	Biology Independent Study	Credit by Arrangement
1401-419	History and Philosophy of the Life Sciences	2
1401-420	Economic Botany	3
1401-424	Morphology of Flowering Plants	4
1401-425	Elementary Plant Physiology	4
1401-426	New Jersey Flora	4
1401-430	Field Ornithology	3
1401-431	Entomology	3
1401-432	Medical Entomology	2
1401-433	Seashore Entomology	2
1401-434	Seashore Ornithology	2

1401-440	Mammalian Anatomy and Histology.....	4
1401-441	Comparative Anatomy of the Vertebrates.....	4
1401-442	Human Physiology.....	4
1401-443	Comparative Vertebrate Embryology.....	4
1401-444	Cell Physiology.....	5
1401-445	Immunology.....	3
1401-446	Endocrinology.....	3
1401-451	Bacterial Physiology.....	4
1401-460	Biological Oceanography.....	3
1401-461	Limnology.....	3
1401-462	Marine Biology.....	4
1401-463	Marine Invertebrate Zoology.....	4
1401-464	Marine Botany.....	4
1401-465	Biology of Marine Plankton.....	4
1401-467	Biology of the Fishes.....	4



BUSINESS AND DISTRIBUTIVE EDUCATION

Graduate Advisors: Dr. Louis C. Nanassy — Business Education

Dr. Joseph C. Hecht — Distributive Education

Department Chairman: Dr. Albert D. Rossetti

The department of business and distributive education prepares teachers of business education for administrative, supervisory and specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement and professional needs.

Admission Requirements

Graduate work toward the Master of Arts degree in Business or Distributive Education presupposes the completion of an undergraduate major in business or distributive education or equivalent.

Requirements for the Master of Arts Degree in Business and Distributive Education

- I. Basic Professional Education6 semester hours
- II. Specialization20 semester hours
 - A. Required Courses
 - 0838-501 Principles and Problems of Business Education3
 - 0838-503 Introduction to Research in Business Education3
 - 0838-603 Seminar in Business Education.....3

At least one of the following for students of Business Education:

 - 0838-511 Improvement of Instruction in Bookkeeping, Accounting and Business Arithmetic.....3
 - 0838-512 Improvement of Instruction in General Business Subjects.....3
 - 0838-513 Improvement of Instruction in Stenography and Secretarial Practice.3
 - 0838-514 Improvement of Instruction in Typewriting and Clerical Practice3

At least one of the following for students of Distributive Education:

 - 0840-550 Improvement of Instruction in Retailing Subjects.....3
 - 0840-552 Improvement of Instruction in Wholesaling and Services.....3
 - B. Electives in Business and Distributive Education
 - Education.....8 semester hours
- III. Free Electives6 semester hours
- IV. Comprehensive Examination. Oral and written, given in the Fall and Spring in conjunction with 0838-603 Seminar in Business Education. Examinations are general in nature and are intended to test maturity of thought with respect to business and distributive education.

Minimum: 32 semester hours

Course Descriptions

- 0838-501 Principles and Problems of Business Education** **3 sh**
 Survey of principles and practices. History of business education, objectives, relationship of business education to general education, trends and problems in the field.
- 0838-503 Introduction to Research in Business Education** **3 sh**
 Evaluation of current literature in business and distributive education, nature and types of research, methods and techniques of research and tools for interpreting statistical data. Student develops outline of research study to be completed in 0838-603, Seminar in Business Education.
 Prerequisites: Principles and Problems of Business Education 0838-501 and an Improvement of Instruction course.
- 0838-504 Evaluation and Measurement in Business Education** **3 sh**
 Constructing, administering, interpreting and evaluating all types of testing and evaluation materials in business subjects.
- 0838-505 Administration and Supervision of Business Education** **3 sh**
 Study of problems of organizing, directing and supervising business education programs at the secondary school and collegiate levels.
- 0838-506 Business Education Curriculum** **3 sh**
 Study of business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.
- 0838-511 Improvement of Instruction in Bookkeeping, Accounting and Business Arithmetic** **3 sh**
 Study of objectives, content, methods, teaching aids and evaluation procedures.
 Prerequisites: Undergraduate courses in accounting and methods or teaching experience.
- 0838-512 Improvement of Instruction in General Business Subjects** **3 sh**
 Study of objectives, content, methods, teaching aids and evaluation procedures for courses such as general business, economic geography, business law and consumer education.
 Prerequisites: Undergraduate courses in general business and methods or teaching experience.
- 0838-513 Improvement of Instruction in Stenography and Secretarial Practice** **3 sh**
 Study of objectives, content, methods, teaching aids, and evaluation procedures for subjects in stenography and secretarial practice. Proficiency examinations in stenography will be given.
- 0838-514 Improvement of Instruction in Typewriting and Clerical Practice** **3 sh**
 Study of objectives, content, methods, teaching aids, and evaluation procedures of subjects in typewriting and clerical practice. Proficiency examinations in typewriting will be given.
- 0838-527 Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines** **3 sh**
 Workshops, which may run simultaneously, in study, planning and development of teaching materials and projects fitted to a particular teaching situation. Individual and small-group instruction with occasional seminar meetings of the entire group.
 Prerequisites: Teaching experience in the field.

0838-528 Field Studies in Business Education 3 sh

Opportunity for the classroom teacher to evaluate some of the practices of business offices, industries and retailing organizations in the metropolitan area. Experience in planning, conducting and follow-up of field trips.

0838-529 Audiovisual Aids in Business Education 3 sh

Develops knowledge and skill using many audio and visual aids available in teaching business subjects. Developing and constructing teacher-made audiovisual aids.

0838-530 Business Education in Post-High School Institutions 3 sh

Purposes, curricula, method and problems of teaching business education subjects in post-high school institutions, including technical institutions, two-year and four-year colleges.

0838-570 Business Education for Teachers of the Disadvantaged 3 sh

Prepares teachers of business subjects to meet specific needs of disadvantaged students. Occupational opportunities open to the disadvantaged, and the secondary school business program which will prepare them for these occupations. Teachers will build curricula and develop special instructional materials and methods needed for disadvantaged students in the inner-city schools.

0838-603 Seminar in Business Education 3 sh

Matriculated graduate student in business or distributive education completes research project in business or distributive education. Course also prepares student for Master of Art comprehensive examinations.

Prerequisite: 0838-503.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Descriptions may be found in the current undergraduate bulletin.

	semester hours
0838-408 Principles of Office Management.....	3
0838-434 Introduction to Data Processing.....	3
0838-435 Computer Applications of Office Systems.....	3
0838-480 Touch Shorthand in Recording Communication	2

Distributive Education

0840-550 Improvement of Instruction in Retailing Subjects 3 sh

Objectives, content, methods, teaching aids and evaluation procedures for courses such as salesmanship, retail store operation, advertising, merchandising and marketing.

Prerequisite: Undergraduate methods in distributive education, or teaching experience in distributive education.

0840-552 Improvement of Instruction in Wholesaling and Services 3 sh

Objectives, content, methods, teaching aids and evaluation procedures for courses such as wholesaling, limited and service types; service, gas stations, cleaning establishments, rent-all and other service organizations.

Prerequisite: Undergraduate methods course in distributive education, or teaching experience in distributive education.

0840-553 Principles and Problems of Adult Extension Distributive Education 3 sh

Organization, promotion, publicity and methods for adult extension classes — using community resources. Includes in-service, preservice and advanced courses for adults in urban and suburban situations.

0840-554 Workshop in Problems of Distributive Education **3 sh**
Intensive analysis of problem-solving in distributive education programs. Discussion experience in teaching and administering distributive education programs. Committee work-seminar method is used.

0840-555 Field Studies in Distributive Education **3 sh**
Opportunity for the classroom teacher to visit retail organizations, wholesaling houses, distribution centers and service establishments in the metropolitan area and evaluate their practices. Experience in planning, conducting and follow-up of field trip.

0840-556 The Project Method in Distributive Education **3 sh**
Development, use and coordination of individual, small-group and class vocational projects providing simulated occupation experience for the high school "non-co-operative" distributive education student.

0840-557 Audiovisual Aids in Distributive Education **3 sh**
Provides the classroom teacher an opportunity to view and use various audiovisual multi-media material and to evaluate, plan and produce own multi-media projects.

0840-558 Distributive Education in the Two-Year College **3 sh**
Objectives, curriculum and administration of the distributive education programs in two-year community colleges.

0840-559 Distributive Education for the Disadvantaged Student **3 sh**
Prepares teachers of distributive education to meet specific needs of disadvantaged students. Special curriculum development as it relates to the co-operative work experience program. Coordination problems in the inner-city area.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Descriptions of courses may be found in the undergraduate bulletin.

	semester hours
0840-454 Principles and Methods of Teaching Distributive Education and Coordination	3
0840-455 Curriculum Development in Distributive Education	2
0840-456 Organization and Administration of Distributive Education.....	2
0840-457 Organization and Administration of Co-curricular Activities in Distributive Education	2

CHEMISTRY

Graduate Advisor: Dr. Joseph F. Becker

Department Chairman: Dr. Richard A. Lynde

The chemistry department offers an individualized graduate program designed for the student's academic background and specific purposes and needs. Individualized programs may include advanced level chemistry courses to provide depth in one area of chemistry, or advanced level courses in several areas of chemistry as well as graduate level courses in the allied sciences or mathematics.

Admission Requirements

The minimum requirements of the Graduate Division as set forth in this bulletin (Admission to Graduate Study) are required for admission to the graduate program in chemistry. When the student is admitted to the Graduate Division, the chemistry advisor will evaluate the background in chemistry, other sciences and mathematics and a specific program will be designed. An entering student should present at least twenty-four semester hours of undergraduate chemistry credits. In consultation with the chemistry advisor, a program may be designed for students with less background to include prerequisites. Candidates for the Master's degree in chemistry should seek the guidance of the chemistry advisor in selecting the six hours of free electives.

Requirements for the Master of Arts Degree in Chemistry

- | | |
|---|----------------------------|
| I. Specialization | 26 semester hours |
| A. Courses in Chemistry at the 500 level or above..... | 15 |
| B. Research: One of the following: | |
| 1905-599 Graduate Literature Search in Chemistry | 2 |
| 1905-600 Thesis | 6 |
| C. Electives in Chemistry, Allied Sciences or Mathematics | 5-9 semester hours |
| II. Free Electives | 6 semester hours |
| III. Comprehensive Examination | |
| | Minimum: 32 semester hours |

Course Descriptions

1905-521 Advanced Theoretical Inorganic Chemistry 3 sh

Current theories of inorganic structure, reactions and properties.

Prerequisites: 1905-341 Physical Chemistry II, 1905-423 Principles of Theoretical Inorganic Chemistry or equivalents.

1905-531 Advanced Theoretical Organic Chemistry 3 sh

Modern theories of organic chemistry with emphasis on electronic theory and reaction mechanisms.

Prerequisite: 1505-430 Advanced Organic Chemistry or equivalent.

1905-540 Chemical Thermodynamics 3 sh

In-depth study of classical thermodynamics. Development of thermodynamic functions describing chemical systems in equilibrium with emphasis on systems of variable composition.

Prerequisites: 1905-341 Physical Chemistry II, 1701-315 Applied Differential Equations or equivalents.

1905-542 Theoretical Physical Chemistry **3 sh**

Theoretical development of quantum mechanics and statistical mechanics as applied to chemistry. Application of theoretical procedures to atomic and molecular structure and bonding.

Prerequisites: 1905-341 Physical Chemistry II, 1701-315 Applied Differential Equations or equivalents

1905-544 Electrochemistry **3 sh**

Principles and application of electrochemistry as related to research and production problems.

Prerequisites: 1905-341 Physical Chemistry II, 1970-343 Experimental Physical Chemistry II.

1905-546 Chemical Spectroscopy **3 sh**

Introduction to the theory and experimental techniques of molecular spectroscopy.

Prerequisite: 1905-341 Physical Chemistry II or equivalent.

1905-548 Chemical Kinetics **3 sh**

Kinetics in its role of elucidating reaction mechanisms. Discussion of recent problems from the chemical literature including fast reaction and enzyme kinetics.

Prerequisite: 1905-341 Physical Chemistry II.

1905-570 Advanced Biochemistry **3 sh**

A detailed treatment of selected topics in biochemistry. Discussions of carbohydrate, lipid and amino acid metabolism, protein synthesis and nucleic acid chemistry.

Prerequisite: 1905-470 Biochemistry or equivalent.

1905-590 Selected Topics in Advanced Chemistry **3 sh each time elected**

An in-depth study of selected areas in either analytical, inorganic, organic or physical chemistry with special emphasis upon recent developments in the field.

Prerequisite: Permission of instructor.

1905-599 Graduate Literature Search in Chemistry **2 sh**

An individual non-experimental investigation utilizing the scientific literature.

Prerequisite: Approval of the department chairman, the graduate advisor, and the faculty thesis advisor.

1905-600 Thesis **4 sh**

Directed individual experimental investigation. Presentation and defense of thesis before the Chemistry Faculty.

Prerequisite: Approval of the department chairman, the graduate advisor and the faculty thesis advisor.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Course descriptions will be found in the current undergraduate bulletin.

	semester hours
1905-410 Advanced Quantitative Analysis.....	4
1905-411 Water Analysis and Purification.....	3
1905-421 Principles of Descriptive Inorganic Chemistry	2

semester hours

1905-422	Experimental Inorganic Chemistry	3
1905-423	Principles of Theoretical Inorganic Chemistry	3
1905-430	Advanced Organic Chemistry	3
1905-440	Physical Chemistry III	3
1905-445	Radiochemistry	3
1905-460	Industrial Chemistry	4
1905-470	Biochemistry	3
1905-472	Experimental Biochemistry	2
1905-490	Selected Topics in Chemistry	3



COMMUNICATION SCIENCES AND DISORDERS

Graduate Advisor: Dr. Warren E. Heiss
Department Chairman: Professor Joseph S. Attanasio

Graduate students have the opportunity to specialize within the broad area of communication sciences and disorders in one of the four major tracks: (1) speech pathology; (2) audiology; (3) the hard of hearing and the deaf and (4) learning disabilities.

All four programs stress an interdisciplinary approach to the understanding and remediation of communication and learning disorders, with emphasis on development of clinical skills. Successful students are those who have a strong need to understand the bases of clinical procedures, who work well with or without supervision, and who, with guidance from the staff, initiate independent projects, taking responsibility for personal growth in intellectual and clinical skills.

Students should indicate their choice of specialization at the time of advisement for matriculation.

Admission Requirements

Speech Pathology

Students wishing to matriculate in this area must have completed the equivalent of 30 semester hours from among the following areas:

A. Professional Education — A minimum of 9 semester hours including one course from each of the following: principles and practices of education, educational psychology and curriculum.

B. Specialization — A minimum of 18 semester hours from among the following: psychology and education of the handicapped, phonetics, anatomy and physiology of the auditory and vocal mechanisms, speech correction, speech pathology, clinical practices in speech correction, measurement of hearing (audiology).

A maximum of 150 hours of clinical practicum completed at the undergraduate level may be applied to the total of 300 hours required for the Master's degree.

Audiology and the Hard of Hearing and the Deaf

Students wishing to matriculate in this area must have a minimum of 18 semester hours from among the following: anatomy and physiology of the auditory and vocal mechanisms, speech and language development, speech pathology, measurement of hearing, auditory rehabilitation, clinical practice in audiology.

A maximum of 150 hours of clinical practicum completed at the undergraduate level may be applied to the total of 300 hours required for the Master's degree.

Requirements for the Master of Arts Degree
in Communication Sciences and Disorders

I.	Basic Requirements	9 semester hours
	One of the following:	
	0824-503 Methods of Research	3

2001-510	Research Methods in Psychology.....	3
*0824-507	Measurements and Evaluation in Cognitive Domain	3
	or	
*0824-578	Testing and Evaluation	3
	or	
*2001-578	Psychological Tests and Measurement	3
	Two of the following:	
0808-500	Nature of Reading.....	3
1220-500	Acquisition of Speech and Language	3
1220-583	Language Disorders in Children.....	3
	Either:	
*2001-563	Theories of Learning	3
	or	
*2001-560	Advanced Educational Psychology.....	3
	The following electives may be taken in place of, or in addition to, required courses listed above by permission only.	
1220-502	Psychology of Oral Communication.....	3
2001-561	Developmental Psychology.....	3
0842-564	Dynamics of Group Process.....	3
2001-568	Psychology of Group Dynamics	3
0826-570	Counseling Adults	3
0826-580	Principles of Guidance and Counseling.....	3
2001-582	Behavior Modification	3
0826-585	Group Guidance and Counseling Activities.....	3
II.	Core Courses	8 semester hours
	Required of all students regardless of specialization:	
2001-565	Psychology of Socially and Emotionally Handicapped.....	3
*2001-573	Physiological Psychology.....	3
	or	
*1220-595	Medical and Physical Bases of Learning Disabilities (Majors in Learning Disabilities may take this course—instead of 2001-573)	3
2001-561	Developmental Psychology.....	3
	(required for Teacher of the Emotionally Disturbed program)	
1220-620	Orientation and Observation in Special Education	2
	The following electives may be taken in place of, or in addition to, required courses listed above by permission only:	
1301-445	The Inner City Family.....	3
0821-540	Social Forces and Education	3
2001-553	Urban Psychology	3
2001-564	Psychology of the Physically and Mentally Handicapped Child.....	3
2208-565	Sociology of Youth.....	3
1220-586	Education of the Handicapped	3
III.	Specialization Requirements	21 semester hours

Speech Pathology

1220-535	Advanced Seminar in Communication Disorders I.....	2
1220-536	Advanced Seminar in Communication Disorders II.....	4
1220-531	Advanced Audiology.....	3
1220-583	Language Disorders in Children.....	3
1220-592	Seminar in Research in Speech Pathology.....	3
Electives.....		6 semester hours

Completion of 150-300 hours of clinical practicum in speech correction depending upon number of hours completed prior to matriculation for the graduate degree.

Audiology

1220-543	Advanced Seminar in Audiology I.....	2
1220-544	Advanced Seminar in Audiology II.....	4
1220-531	Advanced Audiology.....	3
1220-593	Seminar in Research in Audiology.....	3
Elective in auditory rehabilitation.....		3
(1220-537, 569, 570 or 571)		

The Hard of Hearing and the Deaf

1220-531	Advanced Audiology.....	3
1220-561	Clinical Practicum on Teaching the Deaf (150 hours).....	3
1220-569	Teaching Total Communication to the Deaf I.....	3
1220-570	Teaching Total Communication to the Deaf II.....	3
1220-571	Methods of Teaching the Deaf.....	3
1220-578	Seminar in Research in the Hard of Hearing and the Deaf.....	3
Elective.....		3

Learning Disabilities

1220-580	Diagnosis and Correction of Children with Learning Disabilities I.....	3
1220-581	Diagnosis and Correction of Children with Learning Disabilities II.....	3
1220-582	Remediation of Basic Skills.....	3
1220-590	Practicum in Learning Disabilities.....	3
1220-589	Seminar in Research in Learning Disabilities.....	3
Elective.....		6

IV. Electives

Selection from among the following courses will be determined through advisement and will be based on student's needs and interests.

Communication Sciences

1220-522	Advanced Phonetics.....	2
1220-534	Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms.....	3
1220-572	Speech Science and Instrumentation.....	3

Communication Disorders

Speech Pathology

1220-511	Advanced Speech Pathology.....	3
1220-512	Advanced Diagnosis of Communication Disorders.....	3

1220-513	Parent Counseling in Communication Disorders.....	3
1220-514	Communication Disorders of the Aged.....	3
1220-515	Voice Disorders	3
1220-532	Practicum in Speech Rehabilitation.....	2-3
1220-584	Cleft Palate and Oral Deformities	3
1220-585	Stuttering.....	3
1220-591	Organization and Administration of Communication Disorders Program.....	3
1220-594	Independent Study.....	1-3
1220-533	Supervision of Speech and Hearing Programs	3

Audiology

1220-537	Hearing Aids and Hearing Aid Selection	3
1220-538	Differential Audiometry.....	3
1220-540	Practicum in Audiology.....	2
1220-542	Identification Audiometry and Conservation Programs.....	3

Deafness and Hearing Impairment

1220-574	Psychology of Deafness	3
1220-500	Speech and Language Acquisition	3
1220-501	Language Development in the Primary Grades	3

Learning Disabilities

1220-586	Education of the Handicapped	3
2001-564	Psychology and Education of the Physically and Mentally Handicapped Child.....	3
2001-561	Developmental Psychology.....	3
2001-582	Behavior Modification	3
0824-564	Dynamics of Group Process.....	3

Learning Disabilities

Students wishing to matriculate in this area must have:

A standard New Jersey teachers certificate, or equivalent; one year of classroom teaching experience or special instructional experience (speech correction, reading, student personnel); approval by Graduate Committee on Admission for this program; two letters of recommendation regarding teaching or therapy skills.

Note: State certification requirements for Learning Disabilities Teacher Consultants are subject to change.

Additional Departmental Requirements

1. Comprehensive project or examination.
2. Majors in speech pathology and audiology must complete a total of 300 hours of supervised direct clinical experience. Majors in Hard of Hearing and Deaf, and Learning Disabilities, must complete a minimum of 150 clock hours of supervised experience.

Up to 150 hours completed as an undergraduate will be accepted toward the requirement.

Note: Interrelated graduate programs in special education are described on page 155.

Courses are offered in this department that meet prerequisite requirements in speech pathology for admission to the graduate program. In addition, post-master's students may apply for admission to a program leading to certification for Learning Disabilities Teacher-Consultant.

A non-degree certification program for Teacher of the Handicapped is also available (See Approved Certification Programs).

Requirements for Concentration in Teacher of the Socially and Emotionally Handicapped

One course of study in the College's interdepartmental programs in special education prepares students to teach socially and emotionally maladjusted children. This concentration, coordinated by the Psychology Department, also leads to New Jersey certification in Teacher of the Handicapped (Please refer to page 125, for M.A. in Educational Psychology, Interrelated Graduate Program in Special Education.)

Post-Master's Certification Program in Learning Disabilities

A post-Master's candidate seeking certification in Learning Disabilities must complete twenty-four semester hours in the areas of study listed below. Qualified teachers and therapists, however, who have already earned a Master's degree, or completed graduate studies in education, reading, speech correction, psychology, special education, or similar fields, may apply appropriate credits toward the 24 s.h. required for LDT-C certification. The student may not apply more than 15 s.h., however, if Montclair State College is to evaluate and recommend him/her for certification as Learning Disabilities Teacher-Consultant.

Note: State certification requirements for Learning Disabilities Teacher-Consultants are subject to change.

Requirement for Certificate in Learning Disabilities

The graduate advisor will examine the post-Masters applicant's transcripts of completed graduate courses in order to determine which of the following courses may be applied toward certification for Learning Disabilities Teacher-Consultant:

A. Required Studies (not necessarily in separate courses):

	MSC Equivalent
1. Education of the Handicapped	2001-564 or 1220-598
2. Learning Theory	2001-563
3. Physiological Bases of Learning	2001-573 or 1220-595
4. Orientation to Psychological Testing	2001-578 or 0824-578
5. Remediation of Basic Skills	1220-582
6. Diagnosis and Correction of Learning Disabilities	1220-580 & 581
7. 150 clock hours supervised practicum (minimum)	1220-590

B. Electives

1. Group Dynamics	0842-564; 2001-568
2. Teaching Emotionally Disturbed Child	2001-565
3. Curriculum Development for the Handicapped	2001-541

4.	Child Growth and Development	2001-561
5.	Language Development and Disorders	1220-583
6.	Teaching of the Culturally Handicapped	2001-553; 2001-541
7.	Interviewing and Counseling	0826-580; 2001-593
8.	Educational Psychology	2001-560
9.	Community Resources	0826-560; 1220-620

Each student's record will be evaluated by the Office of the Registrar after completing all, or the necessary part, of the 24 s.h. requirement.* If work has been satisfactory completed, and all other requirements have been met, the student will be recommended to the Office of Teacher Education and Certification for certification as a *Learning Disabilities Teacher-Consultant*.

The requirements for this endorsement, in addition to the completion of the prescribed academic program, are:

1. A standard New Jersey Teacher's Certificate
2. Three years of successful teaching experience (Montclair requires two letters of recommendation from a current or previous employer and a notarized statement verifying at least three years of full time paid employment as a teacher or clinician.)
3. A Master's degree in a related field from an accredited college.

Course Descriptions

1220-513 Parent Counseling in Communication Disorders **3 sh**

Parent-child-clinician triad analyzed with emphasis on parent counseling regarding home management of the child, interpretation of diagnostic and therapy findings and referral.

Prerequisite: 1220-411

1220-522 Advanced Phonetics **3 sh**

Skill in use of phonetics in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English and sounds in foreign languages. Stress, phrasing and intonation patterns used in speaking English, with some analysis of these elements in other languages.

Prerequisite: 1220-104 or equivalent.

1220-533 Supervision of Speech and Hearing Programs **3 sh**

Develops skill in supervision of beginning clinicians by experienced therapists; criteria for evaluation, writing critiques and understanding interpersonal relationships that enhance teaching through criticism.

1220-534 Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms **3 sh**

Basic anatomy of mechanisms of speech reception and expression; the integrated functioning of the central nervous system, the autonomic nervous system and the endocrine system; abnormalities of structure and function of the speech and hearing processes; medical and surgical aspects of rehabilitation and hygiene of the ear, nose and throat. Demonstrations and supervised laboratory dissection.

Prerequisite: 1220-208 or equivalent.

*Students should contact Division of Graduate Studies concerning deadline dates for filing APPLICATIION FOR FINAL EVALUATION.

1220-572 Speech Science and Instrumentation 3 sh
Analysis of speech production and reception through use of equipment designed to measure selected features of the communication process.

1220-586 Education of the Handicapped 3 sh
Role of the teacher on the professional team, state and federal legislation relating to handicapped children and adults and community resources for the special child.

1220-591 Organization and Administration of Communication Disorders Programs 3 sh
Problems of organizing and administering a comprehensive speech program in a school system: curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training and integration of the speech program with the total school curriculum.

1220-594 Independent Study 1-3 sh
Students select an area of communication sciences and disorders and, with advisement, study the literature in the field, observe related programs at special schools and centers and write reports on findings. Regular conferences with instructor for guidance and evaluation.

1220-620 Orientation and Observation in Special Education 2 sh
Community resources, professional roles and responsibilities and team operations. On-site visits to special classes and rehabilitation centers or special class guest lecturers.

The following Senior-Graduate courses (1220-439A, B, C, D, E, G and H) may be elected with permission of the graduate advisor. They are designed for students who wish to fulfill certification requirements in speech correction or prerequisites for matriculation for the Master's degree. Specialized areas in the speech sciences are offered as workshops with attendance required during all or part of the six-week summer session, depending upon the number of units elected. 1220-439A, B, G must be taken in sequence. A post summer-session semester, when offered, makes it possible to complete almost all the requirements for speech correction in one summer. Prerequisite or corequisite: Psychology and Education of the Handicapped (2001-564 or 565 or 1220-586).

1220-439A Phonetics.....	3
1220-439B Anatomy and Physiology of the Speech Mechanisms	3
1220-439C Speech Pathology	3
1220-439D Practicum in Speech Correction (equiv. of 461)	1
1220-439E Advanced Practicum in Speech Correction.....	1
1220-439G Voice and Articulation Disorders	3
1220-439H Clinical Procedures in Audiology.....	3

Audiology and Teaching Hard of Hearing and Deaf

1220-531 Advanced Audiology 3 sh
Increase skill in administering tests for pure-tone and speech reception thresholds; evaluation and interpretation of test results and analysis of client histories. Hearing aid evaluation, measurement of recruitment and tests for psychogenic deafness and malingering; pre- and post-surgical audiometry and special problems of differential diagnosis in testing children.
Prerequisite: 1220-468

- 1220-536 Seminar in Audiology** 6 sh
Significant issues in audiology and opportunities for observation and participation in advanced clinical procedures. Minimum of 150 clock hours of practicum experience on and off campus required.
- 1220-537 Hearing Aids and Hearing Aid Selection** 3 sh
Principles and procedures involved in fitting hearing aids and differential selection based on audiometric findings. Characteristics of hearing aids and ear molds.
- 1220-538 Differential Audiometry** 3 sh
Sophisticated and advanced audiometric tests used in differential diagnosis of hearing problems. Demonstration and analysis of functional hearing loss tests, evoked response audiometry, difference limen tests, G.S.R. audiometry and tests for central auditory problems.
- 1220-540 Practicum in Audiology** 2 sh
Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment.
Prerequisite: 1220-538
- 1220-541 Advanced Practicum in Audiology** 2 sh
Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment.
Prerequisite: 1220-538
- 1220-542 Identification Audiometry and Conservation Programs** 3 sh
Approaches to identification of hearing problems in school children and hearing conservation programs. Industrial audiology: noise pollution, damage risk criteria and employment-connected hearing disability.
- 1220-561 Clinical Practicum in Teaching the Deaf** 3 sh
Observing and teaching in a school or program for the deaf. Required of students who have little or no previous experience. Total of 125 hours must be completed with no more than 35 hours credited for previous experience elsewhere.
- 1220-570 Teaching Total Communication to the Hard of Hearing and Deaf** 2 sh
Methods and materials of teaching speech to children with severe hearing impairment. Techniques involving auditory training with amplification and group hearing aids included.
- 1220-571 Methods of Teaching the Deaf and Hearing Impaired** 3 sh
Pre-school to the adult level, with emphasis on language development and compensatory learning.
- 1220-574 Psychology of Deafness** 3 sh
Effects of deafness and hearing loss on the intellectual, social and emotional development of the child; congenital and acquired hearing loss and the behavior of hearing members of the client's world.
- 1220-575 Language Development for the Deaf** 3 sh
Communication problems of the deaf with emphasis on application of psycholinguistics theory to development of language skills.
- 1220-576 Aural Rehabilitation for Adults** 3 sh
Advanced study of techniques for developing lipreading and auditory training. Social and vocational aspects of communication emphasized.

1220-578 Seminar in Research in Deafness and Hearing Impairment 2 sh
Significant problems in the field of deafness and hearing impairment; evaluation of published research projects; critical analysis and experimental design.

1220-593 Seminar in Research in Audiology
Significant problems in the field of audiology; evaluation of published research projects; critical analysis and experimental design.

Language and Learning and Disorders

1220-465 Seminar in Black Language 3 sh
Survey of Black language patterns and their relation to standard English in the Black speech community. Application to the goals of the speech therapist in predominantly Black schools. (Senior-Graduate).
Prerequisite: course in phonetics and psycholinguistics.

1220-500 Speech and Language Acquisition 3 sh
The nature of language and language development in young children. Acquisition of phonological, semantic and syntactic systems studied in framework of biological, cognitive and linguistic theory.

1220-501 Language Development in the Primary Grades 3 sh
Language activities in the elementary school curriculum; techniques for enhancing oral language proficiency in the school age child.

1220-502 Psychology of Oral Communication 3 sh
Speech and language in the individual; problems of communication that lead to confusion of meaning and misunderstanding. Psychology of persons who are handicapped in speech, hearing and/or reading, including those with hysterical or psychogenic impairments. Contributions of learning theory and of psycholinguistics.

1220-580 Diagnosis and Correction of Children with Learning Disabilities I
Conceptual model of learning disabilities; parameters of the diagnostic evaluation of the child who is failing in school. Tests demonstrated; students trained in analyzing results and prescribing individualized educational plans.

1220-581 Diagnosis and Correction of Children with Learning Disabilities II 3 sh
Continuation of 1220-580. Developing instruction plans from diagnostic data. Parameters of managing learning; disabled children within and outside the regular classroom; consultation techniques for use with classroom teachers.
Prerequisite: 1220-580

1220-582 Remediation of Basic Skills (Methods and Materials) 3 sh
Techniques for remediation of reading, writing, spelling, arithmetic, speaking and listening problems with children who are performing poorly in school.
Prerequisites: 1220-580, 581.

1220-583 Language Disorders of Children 3 sh
Psycholinguistic components of language, factors involved in language development and language disorders associated with developmental lag, childhood aphasia, deafness, retardation and emotion problems.
Prerequisites: 1220-500, 580.

1220-589 Seminar in Research in Learning Disabilities 3 sh
Significant problems in field of learning disabilities investigated, and published re-

search projects evaluated. Critical analysis and experimental design.

Prerequisites: 1220-580, 581, 582.

1220-590 Practicum in Learning Disabilities

3 sh

Clinical diagnosis and teaching of children with learning disabilities. Supervision by departmental staff is given to fulfill the 150 hour requirement. Arrangements can be made for both on-campus and off-campus experiences. (Matriculated L.D. majors).

Prerequisites: 1220-580, 581, 582, and permission of the department chairman.

1220-595 Medical and Physical Bases of Learning Disabilities

Critical dimensions of the neurological and physiological growth of the child will be presented. The scope and meaning of the pediatric and neurological examination will be discussed. The relevance of medical data to explain learning disorders will be explored. Aspects of drug and nutritional therapy will be explained. (Permission of department chairman).

Speech Pathology

1220-511 Advanced Speech Pathology

3 sh

Modern techniques of speech rehabilitation and review of research findings in voice, articulation, rhythm and symbolization disorders. Speech rehabilitation integrated with related health services and educational services in schools and special centers.

Prerequisite: 1220-410 or equivalent.

1220-512 Advanced Diagnosis of Communication Disorders

3 sh

Continuation of diagnosis procedure including tests for multiple-handicapped children with communication disorders. Opportunities for interviewing parents, testing and report writing.

1220-514 Communication Disorders of the Aged

3 sh

Communication disorders associated with pathologies that tend to occur in later life, i.e., aphasia, multiple sclerosis, Parkinsonism and cerebral arteriosclerosis.

Prerequisite: 1220-410

1220-515 Seminars in Voice Disorders

3 sh

Selected disorders of voice production: etiology, pathology and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions.

1220-532 Practicum in Speech Rehabilitation

3 sh

Practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences: planning and supervising speech therapy sessions, providing rehabilitative services, interviewing applicants and administering audiometric tests.

Prerequisite: 60 clinical hours in speech practicum.

1220-535 Advanced Seminar in Communication Disorders

6 sh

Diagnostic, therapeutic and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology.

Prerequisite: 1220-410 (These courses taken concurrently may constitute full-time summer session requirement for part-time graduate students.)

1220-584 Cleft Palate and Oral Deformities**3 sh**

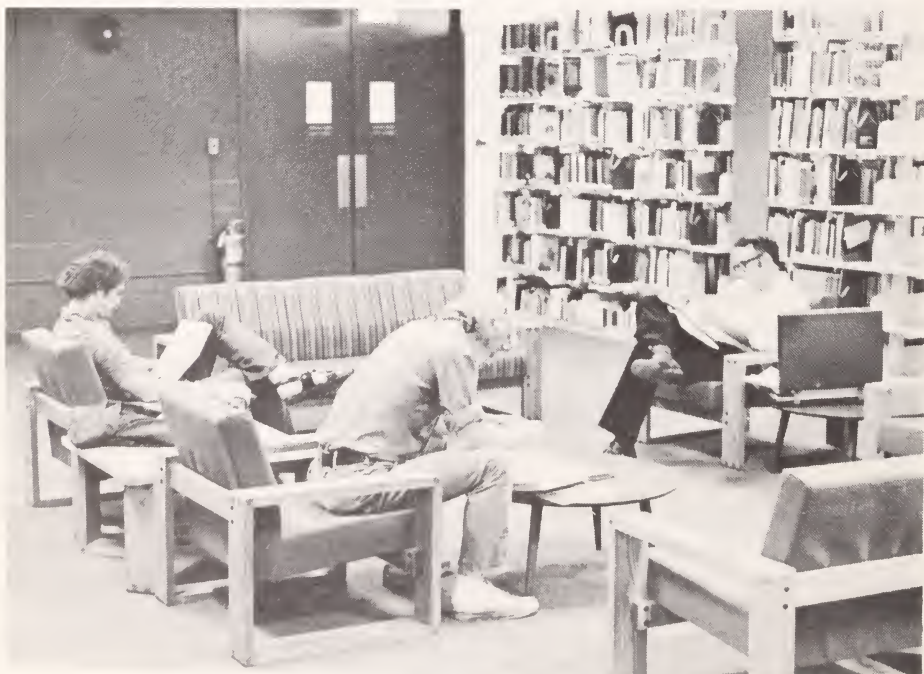
Etiology and characteristics of cleft palate and oral deformities of malfunctions in children; speech therapy and surgical repair procedures. Unit on tongue thrust therapy included.

1220-585 Stuttering**3 sh**

Principles and methods of speech therapy with children who stutter. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and school life. Demonstrations with children who stutter serve as the basis for study and discussion.

1220-592 Seminar in Research in Speech Pathology**3 sh**

Significant problems in the field investigated and published research projects evaluated. Critical analysis and experimental design.



CURRICULUM AND TEACHING

Chairman: Dr. Nicholas Michelli

Graduate Advisor: Dr. Susie B. Boyce

Certification Advisor: Ms. Simone C. Picard (Graduate Office)

M.A.T. Coordinator: Dr. Catherine Becker

The program is designed to enable a candidate with a baccalaureate degree and interest in teaching to earn the Master of Arts and a Teaching Certificate simultaneously. Curricula for standard teaching fields and special urban programs are available, including a Teacher Corps Program to train teachers for work in correctional institutions.

The program is open to students with undergraduate background equivalent to a teaching field in one of the following areas: fine arts, business education (bookkeeping and accounting, distributive education, general business education, secretarial studies), English, foreign languages (French, Spanish), home economics, industrial education and technology, mathematics, music, health and/or physical education, science, social sciences, speech and theater. Additional undergraduate course work in the student's teaching field may be required to meet certification standards.

Upon successful completion of the program, the student will be recommended to the New Jersey Department of Education for a Teaching Certificate. Although students interested in teaching elsewhere should seek information from the appropriate state authorities, requirements are generally similar.

Admission Requirements

In addition to the general requirements for admission and matriculation for the Master's degree, the applicant must file a separate application to the Teacher Education Program by contacting the Graduate Advisor in the School of Education. Admission to the college cannot be considered admission to Teacher Education.

Criteria considered for admission are:

1. Three recommendations, two of which are from college faculty or school administrators.
2. Verification of demonstrated competence in speech by the department of speech and theater.
3. Cumulative undergraduate grade point average of at least 2.67 and a qualifying score on the aptitude section of the Graduate Record Examination. For those whose native language is other than English, the TOEFL Examination may be substituted.
4. Evidence of active interest in community affairs and teaching.
5. Clearance by the Student Personnel Division. (For MSC BA/BS graduates only).
6. Endorsement of the Teacher Admissions Committee (Departmental and School of Educational and Community Services.)

Advisement

Persons interested in the program may secure information from their designated advisors. Upon acceptance, the student will be assigned a School of Education advisor who will cooperatively develop a formal program of course work with a departmental (teaching field) advisor and advise the student continuously. For information about certification in New Jersey, the student may confer with the advisor for certification

programs. For further information on certification, see page 169, under Approved Certification Programs Non-Degree Post-Baccalaureate/Post M.A.

Requirements for the Master of Arts Degree in Teaching

- I. Professional Sequence7-9 semester hours
 - A. Prerequisites
 - 2001-101 General Psychology I Growth and Development.....3
(undergraduate credit only)
 - 2001-200 Educational Psychology.....3
(undergraduate credit only)
 - 0829-410 Field Experiences in Education, or equivalent1-3
 - B. Required Courses.....9 semester hours
 - Major Department Methods3
 - Teacher, School and Society *3
Educational Foundations elective selected from among:
 - 0821-520 Development of Educational Thought
 - 0821-521 Contemporary Educational Thought
 - 0821-540 Social Forces and Education.....3
- II. Education Sequence **12 semester hours
 - A. 0842-564 Dynamics of Group Processes3
and one of the following:
 - 0824-503 Methods of Research
or
0824-504 Action Research for Teachers3
 - B. School of Education electives6
Graduate courses offered by the School of Educational and Community Services, not specifically designed for preparation or certification in some other area of education, selected with approval of the departmental advisor.
- III. Teaching Discipline Courses6-9 semester hours
Graduate courses in the teaching discipline which are covered by the certificate or serve other needs and interests of the student, are selected with approval of the departmental advisor.
- IV. Cultural Electives3-6 semester hours
With approval of the advisor, the student selects courses outside the School of Educational and Community Services and the teaching field, to extend or broaden his general education.
Note: Areas III and IV must total at least 12 credits.
- V. Field Experience (Practicum)10 semester hours
 - 0829-411 Supervised Student Teaching or 0829-414-58
 - 0829-401 Seminar in Professional Education1
 - 0829-412 Senior (Community) Field Experience.....1

Minimum: 43 semester hours

Notes:

1. These requirements in effect for students matriculated after April 1976.
2. The program requires a comprehensive examination. This requirement should

be completed in conjunction with a three credit course (0829-600 MAT Seminar: Relating Instructional Thought & Practices) designed to prepare candidates for the examination. See Graduate Advisor for information.

3. All applicants filing for admission to M.A.T. programs after November 1, 1975 must fulfill the course requirement in the *Human & Intercultural Relations* area as part of the approved programs for initial teacher certification.

4. All students completing certification programs (i.e., initial teaching fields) after September 1977 must successfully complete two courses dealing with the teaching of reading (i.e., 0808-407, 408). See page

*May be taken concurrent with courses in Area V.

**If, in the opinion of the Dean of the School, the student has essentially achieved the objectives of part of the program, that portion of the requirements may be waived. However, the number of graduate credits may not be reduced below 32, and other requirements of the College still apply.

Course Descriptions

0829-0400 Teacher, School and Society 3 sh

An introduction to the field of education. The school as a social and legal system, the nature and function of the teacher. The student: his expectations and his impact on the system. Part of the Professional Semester.

0829-0401 Senior Field Experience 1 sh

Part of the Professional Semester. It is designed to provide for experiences in the community in which one student teaches to better understand the place of the school in the community. Placement in professional semester field center. Course only open to student teachers.

0829-0402 Seminar in Professional Education 1 sh

Part of the Professional Semester. It provides an opportunity to discuss problems encountered in teaching with peers and supervisors and to find practical solutions to problems experienced. Placement in professional semester field center. Course only open to student teachers.

0829-0410 Field Experience in Education (pre-student teaching) 30 hrs.—1 sh; 60 hrs.—2 sh; 90 hours—3 sh.

Thirty hours in a public school as assistant to the classroom or subject teacher. Observing, working with individuals and small groups of students, helping with clubs and student activities, teaching 'mini-lessons' and becoming familiar with teacher activities. Each student keeps a log of activities. Pass/Fail.

Prerequisite: Admission to Teacher Preparation Program. Obtain course application from the SECS Teacher Admissions Office prior to registering for course.

0829-0411 Supervised Student Teaching 8 sh

Student Teaching in the public schools of New Jersey is required of all students who complete the regular program of graduation requirements not for graduate credit. Part of Professional Semester. Not for graduate credit.

0829-0412 Field Work in Urban Education (pre-student teaching) 30 hrs.—1 sh; 60 hrs.—2 sh; 90 hours—3 sh

Similar to 0829-0410 with emphasis on tutoring and individual conferences in urban public school. Student keeps a log of activities. Pass/Fail.

Prerequisite: Admission to Teacher Preparation Program. Obtain course application from the SECS Teacher Admissions prior to registering for course.

0829-413 Field Work in Community Agencies**1-3 sh**

Provides a general understanding of the objectives, scope and activities of one or more agencies in the fields related to education. Students participate in seminars or individual conferences, and prepare a report on their experiences. 30 hours per semester field work for each semester hours of credit.

Prerequisite: Admission to Teacher Preparation Program.

0829-414 In-Service Supervised Teaching I**4 sh**

For the teacher employed under a substandard teaching certificate. Taken concurrently with Seminar: Theory in the Classroom. Joint supervision by school district and college personnel. Visiting professor observes the student in interaction with pupils and confers with the student and his local supervisor. Not for graduate credit.

Prerequisite: 0829-A400, approval of advisor, and agreement with the Superintendent of Schools.

Co-Requisite: 0829-402.

0829-415 In-Service Supervised Teaching II**4 sh**

Continuation of In-Service Supervised Teaching I; the co-requisite seminar is replaced by a series of special in-service conferences included in the course. Not for graduate credit.

Prerequisite: 0829-A414.

0829-419 Workshop in Field Experience**2 sh**

The course complements and reinforces the study of subject-matter methods and prepares for student teaching. Objectives are similar to those of 0829-410 with emphasis on art education and weekly discussion meetings.

Prerequisite: Offered for art education majors in lieu of 0829-410 Junior Field Experience; ordinarily taken concurrently with 0831-300 Foundations of Method and Curriculum in Art Ed.

0829-420 Instructional Innovations**3 sh**

This course will acquaint the student with the rapidly developing innovative practices in teaching. It will consider new ways of organizing students, staff, curriculum, time and space, as well as to investigate such techniques as independent study, group dynamics, programmed instruction and student evaluation.

0829-421 Seminar: Problems of a Classroom Teacher**1-3 sh**

This course is designed to help a student review, evaluate and relate his teacher aide and student teaching experiences to his initial employment as a teacher. It should enable him to analyze his strengths and weaknesses and make adaptations in his techniques and practices. It should be taken concurrently with or immediately after his field experience.

0829-522 Innovations in Teaching**3 sh**

New media and strategies, novel teaching roles, individualized instructional programs, classroom group dynamics and experimental school organizations. Team teaching utilized where feasible. The student prepares an innovation proposal.

Prerequisite: At least one year of teaching experience.

0829-523 Education in the Inner City**3 sh**

The urban school through the eyes of city youngsters, teachers and other educational personnel. Influences of social and economic forces; poverty, family patterns, ghetto

mores, urban unrest, emergent minority leadership, school funding patterns, community agencies and school traditions. Evaluation of federal and other projects, innovative teaching and local action. Student prepares a proposal for improvement of an urban school situation.

0829-525 Innovative Developments in Education: Contemporary Programs 6 sh

A combination of a survey and in-depth analysis of innovations in the educational realm. The course will focus on the availability of resources and experts in the field. Demonstrations, lab work shops and presentations by people currently involved in innovative programs would be emphasized in addition to the study of numerous innovative areas.

0829-530 Principles of Curriculum Development 3 sh

The curriculum as conceived by professionals and the impact of the supporting society. Selecting content; its sequential development in relation to individual differences as they relate to values in a dynamic society. Guiding needed curriculum changes wisely.

Prerequisite: At least one and one-half years of successful teaching experience under certification.

0829-531 Curriculum Construction in the Elementary School 3 sh

Reviewing and bringing up to date basic curriculum development concepts; curriculum construction in a modern elementary school; creating an elementary school curriculum in a specific field for one or more grade levels.

Prerequisite: 0829-A530.

0829-532 Middle School Curriculum and Organization 3 sh

Emerging curriculum of the rapidly developing middle school. Organization of pupils, instruction, media and facilities. Recent social changes and educational innovations; practices in typical middle schools; developing instructional strategies.

Prerequisite: 0829-530.

0829-533 Curriculum Construction in the Secondary School 3 sh

Secondary school curriculum and the needs of a changing civilization. Effective means of curriculum construction.

Prerequisite: 0829-530.

0829-534 Strategies for Curriculum Change 3 sh

Achieving desired educational change in field settings. Principles and concepts from sociology, social psychology, educational administration and curriculum applied to education. Opportunity to develop change strategies for particular field settings.

Prerequisite: One and one-half years of successful teaching experience under certification.

0829-535 Designing Curriculum for Affective and Humanistic Education 3 sh

The design and implementation of curricular approaches to feeling, emotion and process phenomena in the school; evolution, theory and current practice experientially evaluated. Workshops to devise original design models, and simulative and micro-teaching sessions to demonstrate competence in their application.

Prerequisites: 0829-530, 65-200.

0829-536 Curriculum and Teaching in Career Education Programs 3 sh

Overview of the broad objectives and philosophical bases for career education programs; analyses of selected case studies of career education programs in existence;

analysis and evaluation of the process of curriculum development in career education programs; evaluation of selected resources and instructional strategies used in career education programs.

0829-600 MAT Seminar

Seminar Course providing in-depth study of selected topics related to current classroom problems based on sound educational theory and practice as found in current educational literature. The comprehensive examination for the M.A. (major in teaching) will be based on this course.

0829-605 Practicum in Teaching

5 sh

The student initiates and completes an independent study project within the fields of curriculum and instruction.

Prerequisite: Approval of advisor.

0829-635 Research Seminar in Curriculum Construction

3 sh

Individual advanced work in curriculum construction. Admission upon approval of the instructor.

Prerequisites: 0829-530 and 531 or 532 and 533.

Educational Foundations

Chairman: Dr. Thunder Haas

The Department of Educational Foundations has the dual responsibility of servicing and improving established educational programs while meeting new and critical needs of society through philosophic and sociological theory, comparative study, and administration of new innovative programs. In keeping with these professional responsibilities, the department offers foundations courses for the preparation of public school educators and at the same time, tries to satisfy specialized demands beyond the limits of the public schools, through electives and alternative, graduate programs, such as the M.A.T. in Alternative Community Education.

Course Descriptions

- 0821-520 Development of Educational Thought** **3 sh**
 Philosophic assumptions behind various educational theories from Classical to Modern schools of thought. Realism, Idealism, Experimentalism, Scholasticism and other schools; Plato, Aristotle, Aquinas, Descartes, Rousseau and others.
- 0821-521 Contemporary Educational Thought** **3 sh**
 Critical evaluations of schools of philosophy which have contributed to educational thought in the 20th century; Pragmatism, Progressivism, Existentialism, Perennialism, Reconstructionism and others. Current trends and problems; principles underlying educational theory and practice.
- 0821-523 Existentialism in Education** **3 sh**
 Existential motifs in Sartre, Kierkegaard, Nietzsche, Heidegger, Buber and Camus with emphasis on the implications for educational aims, curricula, methods and values. Works of Morris, Kneller, Greene and Happer, who have begun to define Existentialism for education today.
- 0821-525 Human Values and Education** **3 sh**
 Value formation in society and in today's schools: "Who should be taught in the schools?", "Can values be taught to children?", "What ideals are important for boys and girls?" and "What should a student's role or position in school be?"
- 0821-540 Social Forces and Education** **3 sh**
 Examination of various facets of society that have impact on the educational system: economic, political, social, ethnic and religious forces as they relate to problems of educational systems. Field studies included.
- 0821-544 Social Class and Education** **3 sh**
 Social, ethnic and racial customs as they relate to class structure and educational values. Traditions of various social groups; effect on American education; psychological patterns evolving from them.
- 0821-545 Political Forces and Education** **3 sh**
 Political structure and its influence on the educational system and the ability of education to influence the political system. Specific roles played by education and educational leaders in government bodies at various levels.

0821-560 Comparative Studies of Educational Systems **3 sh**
Relationship between social structure and the types of educational institutions; the struggle for change in industrialized societies; efforts for educational change in developing areas. Latin America, Germany, England, France, Soviet Union, Israel, India, China, Japan and selected areas of tropical Africa.

0821-561 Education in Western Europe **3 sh**
Variations in educational thinking and practices in selected countries. Factors influencing educational developments such as political, ideological, socio-economic forces and the relationship between school systems and their cultural contexts.

0821-564 Education in Latin America **3 sh**
The basic social and economic structure and how it relates to secondary school and university systems.

The following 400 level Senior-Graduate courses are available as electives with special permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
0821-440 Sociological Foundations of Education	3
0821-445 Puerto Rican Children in Mainland Schools.....	3

EDUCATIONAL LEADERSHIP

Chairman: Dr. Anne C. Castens

Graduate Advisors:

Educational Leadership:	Dr. Lawrence Bellagamba Dr. Anne Castens, Mr. William Cuff Dr. Frank Merlo, Dr. David Weischadle
Reading:	Dr. Joseph Brunner, Dr. Maria Schantz
Research and Evaluation:	Dr. Gerhard Lang
Technology in Education:	Dr. Grosvenor Rust

Educational leadership, working with other departments of the College and the School, prepares educational leaders in the broadest sense. Programs of graduate study leading to the Master of Arts in Administration and/or Supervision, Reading, and to post-M.A. studies, are offered. In addition, the department offers courses at the graduate levels in educational research and evaluation, technology in education, and reading.

Although the graduate programs are directed toward certification as Supervisor, Principal, School Administrator, Business Administrator, Reading Specialist or Media Specialist, a comprehensive study of the field of educational leadership is encouraged.

Certification programs are also available to those holding M.A. degrees in a subject area and desiring certification as supervisors or administrators.

Three years of successful teaching experience under certification are required for certification as supervisor or administrator.

Our programs provide solid scholastic foundations in the multi-faceted purposes of education in a democratic society. They combine study with close observation and practice in various communities and agencies. The graduate programs in this department prepare students for positions as:

1. major administrative or supervisory personnel at all levels of educational systems.
2. educational managers and planners in the media fields. (eg. media specialist)
3. reading specialists or consultants.
4. educational researchers, evaluators and testing specialists.

Our effort is to select candidates carefully and lead them to be able to:

1. develop a personal philosophy of education and social ethic consistent with related theories of learning and human development.
2. develop characteristics required for effective leadership in education.
3. analyze educational organizations, and plan programs and strategies for increasing organizational effectiveness.
4. develop techniques to facilitate interpersonal and group problem solving and decision making.
5. develop skills in managing change and conflict in educational endeavors.
6. interpret research findings and design and implement research techniques to their organizational needs.

Requirements for the Master of Arts Degree in Administration and Supervision
Admission Requirements

- I. Matriculation into the Master of Arts Program in Educational Leadership (Administration and/or Supervision based on:
 - A. a Bachelor of Arts degree from an accredited institution of higher education.
 - B. a valid teaching certificate issued by a State Department of Education.
 - C. qualifications for graduate study as indicated by the undergraduate scholastic average and scores on the aptitude section of the Graduate Record Examination.
 - D. 2 years of successful teaching experience or other employment judged as suitable educational experience.
 - E. satisfactory completion of Phase I of the program or equivalent (See program below).
 - F. competency in written English and an acceptable statement of personal goals written by the candidate.
 - G. recommendations of three educational leaders, one an instructor in Phase I courses.
 - H. personal characteristics for leadership as displayed in a department interview.
 - J. a matriculation examination taken and passed while in the process of completing Phase I.

A student must apply for graduate study to determine his eligibility before completing six semester hours of course work in Educational Leadership in Phase I or equivalent. Final action is also based on all-College requirements and any special individual requirements assigned to the student by the Educational Leadership faculty.

Transfer students wishing to have prior course work recognized which has been taken at another accredited institution must take at least two Phase I courses at Montclair State College within the last five years before matriculation.

Program Requirements

II. Phase I Requirements.....	9-12 semester hours
0824-503 Methods of Research.....	3
A graduate course offered in the social and behavioral sciences or humanities, approved by advisor	
0827-510 Educational Administration I.....	3
0842-564 Dynamics of Group Process or the successful completion of a course in group dynamics at the graduate level of any accredited college, or by participation in a Human Relations Laboratory of at least one week's duration conducted by an accredited institution.....	3
III. Phase II Requirements.....	9 semester hours
0829-530 Principles of Curriculum Development.....	3
0827-540 Supervision I (Principles).....	3
Elective approved by advisor	3
IV. Phase III Requirements	12-21 semester hours
0827-615 Field Experience in Administration and Supervision	3

Electives to be selected after consultation with the advisor, and listed in the Master of Arts work program. They may be selected to satisfy certification requirements. Certain courses outside the School may be selected. A concentration in Media or Educational Research and Evaluation is possible with Supervisor's Program.

V. Comprehensive Examination

Minimum: 33 semester hours

ADVANCED GRADUATE STUDY IN ADMINISTRATION AND SUPERVISION

Students holding a Master of Arts degree and New Jersey certificate for Principal, who wish to continue planned graduate study of thirty additional semester hours will be required to meet all matriculation requirements for admission to the Master of Arts program in Administration and Supervision, and make a satisfactory grade on a comprehensive examination covering the field. Such a thirty hour program will need to be approved by a faculty advisor so as to meet the professional goals of the student, including certification for Administrator (Superintendent of Schools) in New Jersey. (See also page 172).

Requirements for the Master of Arts Degree in Reading

Admission Requirements

Provision is made in this program to matriculate students who have demonstrated interest and ability suitable to reading education. Applicants shall furnish acceptable evidence of talent appropriate for competence in reading instruction. Letters of recommendation from the school system superintendent or the school building principal will be acceptable. Final matriculation is the departmental decision; prerequisites will be determined by departmental advisement.

Program Requirements

- I. Basic Professional Education6 semester hours
 - 0824-503 Methods of Research (required)3
 - Elective in School of Educational and Community Services3
- II. Required Courses in Reading.....12 semester hours
 - 0808-500 The Nature of Reading.....3
 - 0808-511 Case Studies of Reading Difficulties3
 - 0808-513 Corrective and Remedial Reading I3
(written permission required)
 - 0808-505 Research Seminar in Reading3
(written permission required)
- III. Elective Courses in Reading6 semester hours

Students must take additional reading electives in order to meet specialization requirements.

 - 0808-501 Techniques of Reading Improvement in Secondary Schools.....3
 - 0808-502 Administration and Supervision of Reading Programs.....3
 - 0808-503 Literature for Adolescents.....3
 - 0808-504 Reading Needs of Adult Learners.....3
 - 0808-506 Reading Resources3
 - 0808-509 Teaching of Communication Skills.....3
(Open to M.A.T. and certification students only)
 - 0808-510 Field Experience in Reading.....3
 - 0808-512 Seminar in Reading Difficulties3

0808-514	Corrective and Remedial Reading II	3
	Recommended (written permission required)	
IV.	Free Electives	6 semester hours
	Any graduate courses offered by the College	
V.	Additional Department Requirements	
A.	Supervised clinical experience within the framework of required courses and/or in addition to course work. Arrangements will be made to provide this experience in the Montclair State College Reading Center.	
B.	A written comprehensive examination, supplemented if necessary by an oral examination, or an equivalent comprehensive experience determined by the Department.	
C.	A reading portfolio containing representative work and personal contributions in reading will be compiled by the student. This portfolio will be used to diagnose students' strengths and weaknesses as they progress through the program.	
	Minimum:	33 semester hours

In March 1976, The New Jersey Board of Education passed a proposal for a six-semester hour or two-course requirement in the teaching of reading as it pertains to the field for which certification is being sought. This requirement becomes effective September 1977. Courses will be available through the Reading Program in the School of Educational and Community Services.

Students seeking teacher certification, therefore, must complete the following reading courses prior to filing for certification:

0808-407	Developmental Reading: Principles and Techniques Part I	3 sh
0808-408	Developmental Reading: Principles and Techniques Part II	3 sh

PROGRAM LEADING TO THE READING SPECIALIST CERTIFICATE.

Minimum Requirements: Initial teaching certificate; two years of teaching experience; and a program of 30 hours of study. See advisors for further information.

Course Descriptions

Administration and Supervision

0827-510 Educational Administration I	3 sh
Nature and dynamics of organizations from the viewpoints of social and behavioral sciences. Leadership, decision-making, conflict resolution and other theories considered in the educational setting. Impact of environmental and personal forces on organizational behavior.	
Prerequisite: One and one-half years of successful teaching under certification.	
0827-511 Educational Administration II	3 sh
Processes and findings of organization science applied to educational problems. Frameworks for instruction, personnel, finance, facilities, service and public participation at the school district level. Emphasizes issues, trends and contemporary problems.	
Prerequisite: Education Administration I 0827-510.	
0827-512 Administration of Elementary Schools	3 sh
Educational leadership required for effective elementary school organization and administration. Changing role of the principal, his relationships with staff and students and current principles, practices and techniques with regard to scheduling, staff utiliz-	

ation, plant operation, student activities and school community relations.

Prerequisite: Educational Administration I 0827-510.

0827-513 Secondary School Administration 3 sh

Special administration problems of the junior and senior high school. Recruitment of staff; scheduling of teachers and students; department organization and school morale. Recent experiments of organization structure. Supervision of instruction as a major function of administration. Current demands of adults in the community. How the secondary school operates in relation to the elementary school and higher education to help design education as a continuous process. Students write a paper on a special administrative problem.

Prerequisite: Educational Administration I 0827-510.

0827-514 Vocational School Administration 3 sh

Characteristics, needs, problems and organizational patterns of vocational schools. Experience, procedures, practices for appraising programs and individual achievement. Identification and assessment of current issues and trends in technical and vocational education as an integral part of the total school program.

Prerequisite: Educational Administration I 0827-510.

0827-521 Education Law 3 sh

Legal-theory, practical politics, relationship of school district organization to other units of government, appellate function of the State Commissioner of Education and the State Board of Education, New Jersey school laws (Title 18A of the Revised Statutes) and Rules and Regulation of the State Board of Education and their decisions. New Jersey School legal structure compared with that of other states.

0827-523 School Plant Planning 3 sh

The relationship between educational facilities and educational programs. Site selection, development of educational specifications, the physical environment, selection of equipment, programming of various facilities based on curricula and community needs. Group visits to exemplary educational facilities.

Prerequisites: A course in the principles and methods of curriculum design, and Educational Administration 0827-510.

0827-526 School Business Administration 3 sh

Role of school business administration in the public school. Various functions, structures and techniques of operation. Simulation techniques utilized to construct both a traditional and PPBS budget.

Prerequisite: Educational Administration 0827-510.

0827-540 Supervision I 3 sh

School personnel as principals, coordinators and department and subject area supervisors in elementary and secondary schools. Contribution and supervisors in instruction and in supporting the professional work of classroom teachers.

Prerequisite: One and one-half years of teaching experience, and Educational Administration 0827-510.

0827-541 Supervision II 3 sh

The day-to-day supervision of schools at certain levels and within special subject areas of study. Organizing for instructional improvement and innovation; giving attention to new teachers, probationary teachers. Each student prepares a file on helpful ideas, plans, descriptions of practice, materials of instruction suited to the level or special subject area in which he plans a career.

Prerequisite: Supervision I 0827-540 or its equivalent and 0827-510.

**0827-560 Workshop Seminar in Higher Education:
The American College**

3 sh

Overview of structure and functioning. History, philosophy, sociology and politics of the college as a unique and dynamic institution in American society: educational opportunity and the organization of higher education; open admissions; status, trends and implications; minority group youth in higher education; student initiatives for reform; faculty governance; etc.

0827-565 The Two-Year Junior College

3 sh

History, purpose, patterns and trends of the two-year college, including the junior college, the community college and university extension centers.

0827-610 Theory and Research in Administration

3 sh

Applies organization science to individual problems in educational administration. Experience in the internship of field experience are given scholarly analysis.

0827-611 Advanced Seminar on Educational Issues

3 sh

Final integrating experience in the leadership program. Implications for educational administration of major contemporary issues and trends.

Prerequisite: Permission of graduate advisor.

0827-615 Supervised Field Experience in Administration and Supervision

3-6 sh

Students are assigned work within an educational agency, operating at the level and in the domain of their professional specialty. They work under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the college supervisor. This experience is not to be construed as an "internship," as it will not encompass the total job description of the administrator. A written report on the activity or research paper will be approved by the administrator and presented to the college supervisor, who will evaluate the total experience.

Prerequisite: Permission of a graduate advisor.

0827-616 Internship in Educational Administration

6 sh

Full semester assignment of guided work within an educational institution's administrative office. Sixth year students are eligible to choose this internship plan, but it is advised that arrangements be made for released time, at least one half time, if the internship is to be carried on in an institution where student is employed. The experience is planned to include a wide variety of administrative experiences such as locating and interviewing candidates for positions, scheduling, inservice professional development, special committee leadership, projects that influence curriculum building arrangements and budgets. The sixth year student may be required to take 0827-610 or 0827-611 for three additional semester hours during this internship. In all cases, he will complete his research project as a part of his internship assignments. (Open only to Post-Master Study.)

Prerequisite: Permission of advisor.

0827-620 Systems Analysis in Education

3 sh

Latest techniques in operations research for educational purposes. Systems analysis techniques studied and utilized by student in an instructional, curriculum or administrative mode. Simulation techniques in classroom-oriented activities.

Prerequisite: 0827-510 and 0829-530.

0827-622 School Finance**3 sh**

Current economic environment; state, local and federal taxation; state school aid theory and practice; school district indebtedness; statutory school budget and fiscal controls; various cost-quality instruments and role of school fiscal structure in relation to local, state and federal governments.

Prerequisite: Educational Administration I 0827-510; School Law 0827-521.

0827-623 Advanced School Plant Planning**3 sh**

Advanced course in school plant enables student to plan an innovative educational facility. Independent (contract) study approach, coupled with scheduled critiques with professor is main method of instruction.

Prerequisite: A course in school plant planning and 0827-510.

0827-625 School Plant Maintenance and Operation**3 sh**

Latest techniques in the maintenance and operation of the school plant. Various specialists in specific areas of study utilized in the instructional program. Determination of work loads, formulation of job descriptions, supply storage, care of mechanical and hand tools and equipment and care of the school site. (Not offered every year.)

Prerequisite: Educational Administration I 0827-510.

0827-643 Staff Personnel Administration**3 sh**

Personnel practices and problems in current school situations. Roles of policy-making bodies, the public, professionals, para-professionals and general staff in effective communication for the optimum use of human resources. Problems relate to such areas as recruitment, selection, retention and evaluation of staff.

Prerequisite: Educational Administration 0827-510 and Supervision I 0827-540.

Reading

0808-407 Developmental Reading: Principles and Techniques I**3 sh**

For classroom and non-classroom personnel whose major responsibility is instructing students. Developing those skills, understanding and competencies in the nature of the reading process, specific word recognition and comprehension, classroom diagnostic techniques.

0808-408 Developmental Reading: Principles and Techniques II**3 sh**

Enables content area teachers to understand the developmental nature of the reading process and employ specific techniques to facilitate and improve reading competencies.

0808-500 The Nature of Reading**3 sh**

The foundations of reading: the nature of the reading process, readiness, beginning instruction, current practices in the teaching of reading in early childhood and elementary education, a reappraisal of the role of reading in a technological society.

0808-501 Techniques of Reading Improvement in the Secondary School**3 sh**

The improvement of non-clinical reading difficulties in the content subjects. For the subject area teacher and the beginning reading specialist. Secondary school reading needs, and specific suggestions for guiding the slow, average and gifted student in a classroom situation.

0808-502 Administration and Supervision of Reading Programs**3 sh**

The more complex aspects of organizing and administering reading programs: theory and techniques of leadership, program development, organization of in-service pro-

grams; developing a budget, methods of evaluation, etc. Essential background for reading specialists to establish or administer a functional school reading program.

0808-503 Literature for Adolescents

3 sh

Background for the development of recreational reading programs in junior and senior high schools. Literature written for students, as well as literature intended for adults but read widely by adolescents. Criteria for book selection, censorship, role of mass media, minority group identification through books, bibliotherapy, bibliography, and the importance of the librarian.

0808-504 Reading Needs of the Adult Learner

3 sh

For teachers of out-of-school youth and adults: language learning and related psychological factors; methodology and reading instruction; literature and the reading program and innovations in reading instruction.

0808-505 Research Seminar in Reading

3 sh

Problems in the field of reading suggested by: educational events and trends; members of the class; and educational movements in New Jersey, the country and the world. Each student will execute and report an individual research effort. Written permission required.

0808-506 Reading Resources

3 sh

Software, hardware, multi-media and multi-sensory materials available in the schools and in adjunct facilities; philosophic, psychological and academic considerations of reading resources. Video tape demonstrations of materials.

0808-509 The Teaching of Communication Skills

3 sh

Abilities, limitations and needs of students in speaking, listening, reading and writing. Adaptations in curricula, assignments and procedures to the levels of students in a classroom; remedial measures. Speech, Reading and English Instructors involved in course.

Open to M.A.T. and certification students only.

0808-510 Field Experience in Reading

3 sh

Agencies and programs dealing with reading. Students observe, participate and report activities of the agencies. For students in long-range research with limited teaching experience, who need additional field and clinical experience. Independent study.

Prerequisite: Permission of the advisor to the M.A. program in Reading.

0808-511 Case Studies of Reading Difficulties

3 sh

Techniques for diagnosing reading difficulties; the most frequently used tests and inventories; the actual testing of a child with reading problems. Group and individual tests, survey and diagnostic tests, and standardized and informal tests: reporting to parents, schools and agencies.

Prerequisite: 0808-500 and permission of the instructor.

Additional diagnostic hours will be arranged.

0808-512 Seminar in Reading Disabilities

3 sh

Significant problems in the field of reading disability; historical and emerging models used in reading diagnosis.

0808-513 Corrective and Remedial Reading: Part I

3 sh

0808-514 Corrective and Remedial Reading: Part II

3 sh

For advanced students and specialists involved in some aspect of remedial instruction.

Part I: Investigation and interpretation of serious reading problems; causes of reading difficulties; techniques of remedial and corrective treatment. Part II: Selection and adaptation of suitable improvement devices, materials and ideas; intensive treatment in a practicum situation. Clients are drawn for the classes in the Reading Laboratory. Additional tutoring hours will be arranged.

Prerequisite: Written permission of the instructor required.

Educational Research and Evaluation

0824-503 Methods of Research

3 sh

The theory and methods of historical, descriptive and experimental research: formulation of a research problem; use of bibliographical sources and reference materials; statistics and measurement in research; types and instruments of research; data collection and analysis; writing the research report and career opportunities in research.

0824-504 Action Research for Teachers

3 sh

Principles and techniques of research applicable to classroom situations. Various kinds of classroom research are studied and analyzed. Practice provided in planning and outlining a research project, the development of experimental designs and evaluation of the structure and outcomes of classroom research. Open to M.A.T. and certification students only.

0824-505 Interpretation and Application of Educational Research

3 sh

Provides an understanding of research studies dealing with current issues in education. Representative research and evaluation studies will be critically analyzed.

0824-507 Measurement and Evaluation: Cognitive Domain

3 sh

Theory and practice to develop comprehension of and skill in constructing tests in the cognitive domain, such as intelligence, achievement and aptitude tests. Basic measurement concepts relating to test construction. Each student will carry out a project geared to his/her needs.

0824-508 Measurement and Evaluation: Affective Domain

3 sh

Theory and practice to develop comprehension of and skill in constructing tests in the affective domain, such as opinionnaires, interest tests, self concept tests, personality inventories, and attitude scales. Basic measurement concepts relating to test construction. Each student will carry out a project geared to his/her needs.

0824-578 Testing and Evaluation

3 sh

Principles and practices of educational and psychological testing and evaluation relevant to professionals in student personnel services, human organizational processes, communication sciences and disorders, education, and related fields. Historical/philosophical orientation; place of testing in instructional and remedial programs; statistical concepts underlying measurement; validity, reliability, response set; construction of tests and measurement instruments; evaluation and interpretation of testing data; use and misuse of testing data; reporting data to students, parents and colleagues; critical analyses of selected standardized intelligence, ability and personality tests; experimental tests and measurement instruments. Course project geared to individual student needs.

0824-603 Seminar in Research**3 sh**

Opportunity to carry out a research project-historical, descriptive or experimental in nature — culminating in a written report.

Prerequisite: Methods of Research 0824-503 or equivalent.

0824-630 Evaluation of Educational Programs and Personnel**3 sh**

Problems, issues and procedures involved in designing and carrying on evaluation studies dealing with institutions, programs, curricula and personnel performance. Students will undertake an evaluation project and write a project report. Course content and requirements will be geared to individual needs of students.

0824-650 Independent Study in Educational Research and Evaluation**1-3 sh**

Designed for individuals who, in consultation with advisor, wish to undertake an in-depth analysis of a specific problem. Permission of the faculty advisor is required.

Technology in Education

The Instructional Media Courses offered below are available as a sequence of study to meet the educational media specialist certification requirements. Persons wishing to prepare for one of the two certificates should arrange for a conference with the proper advisor.

A Master's Degree and either a standard New Jersey teacher's certificate or an Associate Educational Media Certificate are required as prerequisites to the issuing of the Educational Media Specialist Certificate. A Bachelor's Degree and a standard New Jersey teacher's certificate are required as prerequisites to the issuing of the Associate Educational Media Certificate. Course descriptions for the related undergraduate program leading to this last certificate are provided in the undergraduate catalog.

0841-500 Instructional Technology in Curriculum Implementation and Design**3 sh**

The organizing and integrating of media in school curricula and other educational programs. Identifying instructional purposes and defining roles for technology and media in learning and teaching. Examining and comparing curriculum designs for their concordance with the procedures of technology in education. Selection and evaluation of materials.

0841-520 Production of Materials for Media Technology**3 sh**

For developing advanced proficiency in preparing audio, photographic and graphic materials. Especially for persons charged with materials preparation in media centers. Laboratory instruction.

0841-521 Design of Innovative Curriculum Resources**3 sh**

Emphasizes systems design, software, program development, creative development of media for special learning situations, basic design of programmed instruction and multi-media techniques.

Prerequisites: Completion of 0520 or concurrent enrollment in 0520.

0841-925 Photographic Communication in Education**3 sh**

Offered for the development of competency with the photographic processes and equipment commonly used in producing educational media. Extensive laboratory and camera work required. Emphasis is on proficient creativity for instruction utilization.

0841-540 Television Production in Education**3 sh**

Laboratory and seminar in television studio production. Camera operation, principles of lighting, sound, elements of set design, functions of floor director, control room operations and basic television directing.

0841-541 Television Programming in Education**3 sh**

Combination lecture, laboratory and seminar in programming, conceptual creativity, pre-planning, execution of ideas and evaluation of presentations. Selection and design of hardware.

Prerequisite: Completion of 9540 or permission of instructor.

0841-550 Administration and Supervision of Technology in Education**3 sh**

Provides training for management and supervision of integrated instructional resources programs. Emphasis is on the practical day-to-day problems of control, production, acquisition, utilization, finance, staffing, organization and evaluation for the provision of media and technology in educational enterprises. Additional attention is given to community relationships and special services.

0841-610 Research and Development in Instructional Technology and Resources**3 sh**

A practicum on application of research findings to the design and utilization of instructional media and resources. Emphasis is on extraction of practice from theory and research findings.

Prerequisite: 0824-503 or equivalent.

0841-615 Supervised Field Experience for Educational Media Certification**3 sh**

Students are assigned work within an educational media center, operating at the level and in the domain of their professional specialty. They work under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the college supervisor. This experience is not to be construed as an "internship," as it will not encompass the total job description of the media specialist. A written report on the activity will be approved by the administrator and presented to the college supervisor, who will evaluate the total experience.

The following Senior-Graduate level courses are open to graduate students pursuing certification under the 1974 media certification act. Approval of graduate advisor is required for inclusion in a program of study.

1601-401	Fundamentals of Cataloging and Classifying Educational Resources.....	3
1601-402	Reference and Bibliography for School Resource Centers.....	3
1601-403	Reading Materials for Children and Youth: Selection and Evaluation	3
0841-404	Organization and Administration of a School Media Center	3
0841-420	Teaching Materials Workshop	3
0841-430	Television Services in a Single School Media Program.....	3
0841-445	Audio Technology in Education.....	3

ENGLISH AND COMPARATIVE LITERATURE

Graduate Advisor: Dr. James Nash

Department Chairman: Dr. Claire Healey

The department endeavors to prepare literary critics, productive scholars and accomplished teachers. Through courses in British, American and Comparative Literature, the department strives to give the student broad perspective. Through seminars for advanced students, it hopes to achieve indepth insights.

Admission Requirements

Candidates for matriculation in the Master of Arts program of this department must show a B average or better in their undergraduate work and a score of not less than 500 (Verbal) on their Graduate Record Examinations. Most applicants will have majored in English at the undergraduate level. Students with strong academic credentials may also apply, even if they do not have the recommended background in English. The graduate advisor will interview each candidate for the program regarding his scholastic record and his intellectual and professional goals.

Requirements for the Master of Arts Degree in English and Comparative Literature

- I. The minimum requirement is 33 semester hours of academic credit. Within the offerings of the department, the student may choose areas of study best suited to his individual needs and ambitions.
- II. Students will be required to enroll in 1501-605 Seminar in Literary Research, and in 1501-606 Thesis Writing. In these courses, the student documents and completes his Master of Arts thesis. The thesis is written under the direction of a member of the graduate faculty.
- III. The foreign language requirement may be fulfilled by passing a written test in translation. Students of comparative literature will receive approval of the language of their primary area of study. Otherwise the language will normally be French, German, Italian, Russian or Spanish. No student may undertake his thesis project until he has fulfilled the language requirement.
- IV. All candidates are required to take a three-hour examination which tests critical judgment and general sensitivity to British and American literature. This examination is also a test of competence in written expression.

Preparation for the comprehensive examination is the student's responsibility. He may, however, ask for guidance from any and all members of the graduate faculty. For best results on the comprehensive examination the graduate faculty recommends that the student structure his course choices for exposure to studies in genres, periods, individual authors and criticism, both historical and contemporary. The comprehensive examination, which is given in October and March of each year, may be taken any time after the student has completed one half of his course credits. The student should consult the graduate advisor in advance of the scheduled examination.

Course Descriptions

British Literature

1501-500 Old English Literature	3 sh
Specimens of alliterative poetry, including Beowulf, are read in the original for an appreciation of the literary art and the language medium.	
1501-505 Chaucer	3 sh
Selected works in Middle English.	
1501-508 Shakespeare Studies: Tragedies	3 sh
The complete canon in the genre.	
1501-509 Shakespeare Studies: Comedies	3 sh
The complete canon in the genre.	
1501-510 Shakespeare Studies: Histories	3 sh
The complete canon in the genre.	
1501-511 Elizabethan and Jacobean Drama	3 sh
Investigates drama before, during and after Shakespeare.	
1501-512 Renaissance I: Major Prose Writers	3 sh
More, Erasmus, Castiglione, Sidney, Nashe and Hooker.	
1501-513 Renaissance II: Major Poetry	3 sh
Wyatt, Surrey, Raleigh, Spenser, Sidney, Shakespeare and Others.	
1501-515 Seventeenth Century Literature: Poetry	3 sh
1501-516 Seventeenth Century Literature: Prose	3 sh
1501-518 Milton	3 sh
Major writings in verse and prose read and discussed in light of current scholarship.	
1501-520 Restoration and Eighteenth Century Drama	3 sh
Playwrights from Wycherly to Sheridan.	
1501-521 The Augustan Age	3 sh
Reconstructs the context of Restoration and eighteenth century satire in terms of the prevailing mentality and political institutions.	
1501-525 English Novel from Defoe to Austen	3 sh
Defoe, Richardson, Fielding, Smollett and Sterne are the principal authors studied.	
1501-529 Brith Romanticism I	3 sh
Wordsworth and Coleridge.	
1501-530 British Romanticism II	3 sh
Byron, Shelley and Keats.	
1501-531 Victorian Studies I	3 sh
Non-fiction writers such as Carlyle, Mill, Newman, Ruskin, Arnold and Huxley.	
1501-532 Victorian Studies II	3 sh
Novelists such as Dickens, Thackeray, the Brontes, Eliot, Trollope and Meredith.	

1501-533 Victorian Studies III**3 sh**

Later poets of the era such as Rossetti, Swinburne, Hardy, Bridges, Hopkins, Thompson.

1501-535 Hardy, Joyce and Lawrence**3 sh**

The major works are studied intensively.

1501-540 The Modern British Novel**3 sh**

Working in both serious and comic veins, the course deals with such writers as L.P. Hartley, Anthony Powell, Doris Lessing and Kingsley Amis.

1501-542 Modern British Literature Irish Renaissance**3 sh**

The course will cover the Irish contribution to 20th Century literature and aesthetic theory with special attention given to the works of W.B. Yeats, James, Joyce, J.M. Synge, Sean O'Casey, and Frank O'Connor.

American Literature**1501-550 Studies in Early American Literature****3 sh**

Authors who most effectively or creatively reflected the major cultural developments of the Colonial period.

1501-555 Emerson, Thoreau and Whitman**3 sh**

In-depth study of the major works.

1501-556 Poe, Hawthorne and Melville**3 sh**

Three nineteenth century writers are evaluated in terms of their own critical assumptions and of recent scholarship.

1501-557 Twain, Howells and James**3 sh**

Development of the art of fiction. Works of the three men are studied in relation to the literary heritage they reflect.

1501-560 Modern American Fiction**3 sh**

Development of the American novel with emphasis on form, substance and critical theory. Dreiser, Crane, S. Anderson, Hemingway and Faulkner are among the authors considered.

1501-561 Modern American Poetry**3 sh**

Selected major American poets from Emily Dickinson to the present.

1501-563 Recent American Fiction**3 sh**

American fiction since 1950. Authors considered include Bellow, Flannery O'Connor, Updike, Mailer, Ellison.

1501-564 American Drama**3 sh**

Playwrights may be chosen for special study: Eugene O'Neill, Elmer Rice, Maxwell Anderson, Thornton Wilder, Tennessee Williams, Arthur Miller and Edward Albee.

Comparative Literature**1503-512 Literary Criticism to 1800****3 sh**

Plato, Aristotle, Horace, Longinus, and their imitators and "interpreters" in the Medieval, Renaissance and Neo-Classical periods.

1503-513 Literary Criticism from 1800 to the Present**3 sh**

The break from classical theory (notably by the Romantics) and the search, principally in our own day, for new definitions of the function of literature.

Prerequisite: 1503-512 or permission of instructor.

1503-570 Greek Classical Drama**3 sh**

Plays of Aeschylus, Sophocles, Euripides and Aristophanes are studied in the context of Athenian stage traditions.

1503-571 The Modern Novel**3 sh**

Selected works by European, English and Latin American masters. Books read will show the evolution of the novel in the 20th Century and will include examples of major trends and types of novels considered within the context of "modern" concepts of space, time, dream, and psychology. Authors whose books will be studied include Kaskas, Dos Passos, Woolf, Gide, Hesse, Beckett, Nin, Cortazar, Fuentes, Duras.

1503-574 Ibsen, Strindberg and Shaw**3 sh**

Three great forerunners of twentieth century drama are studied intensively.

1503-575 Myth and Literature***3 sh**

Part I deals with the relationship of myth and ritual to literature with special attention to the theories of Frazer, Freud, Jung, Campbell, Cassirer and Neumann; Part II investigate recurrences of ancient myths in literature. Course must be taken in sequence.

1503-576 Major Neo-African Writers**3 sh**

Intensive study of such authors as Machado de Assis, Dunbar, Brown, Césaire, Senghor, Brooks and Scott in the light of European, American and African scholarship.

1503-577 Literature and the Film***3 sh**

Designed to examine especially the novel and drama as they appear in film. One genre is chosen for a given semester's study.

Education**1501-580 Recent Research and Experiment in the Teaching of English****3 sh**

Current methods of the teaching of English in the secondary schools and research in language, literature and composition.

1501-581 Studies in Communications Skills**3 sh**

Opportunity for teachers to study new multi-media methods of instructing basic verbal and research skills and to develop and test instructional materials for use in their own classrooms.

Seminars and Thesis**1501-600 Seminar in British Literature****3 sh**

Advanced study of a genre, movement, criticism or a single author in depth. Limit — 15 students. Approval by instructor.

1501-601 Seminar in American Literature**3 sh**

Advanced study of a genre, movement, criticism or a single author in depth. Limit — 15 students. Approval by instructor.

*See current announcements for specific content of the course and name of instructor.

1503-602 Seminar in Comparative Literature**3 sh**

Advanced study of a genre, movement, criticism or a single author in depth.
Limit — 15 students. Approval by instructor.

4903-603 Seminar in Computers in the Humanities**3 sh**

Types of literary research suitable for analysis by computer techniques including linguistic chronology, linguistic geography, authenticity and attribution, stylistic analysis and computer-assisted instruction. Elementary programming and a computer research project.

Limit — 15 students. Approval of instructor.

1501-605 Seminar in Literary Research**3 sh**

Instruction and practical experience in such areas as reference sources, textual study, kinds of criticism and the basics of editing. Recommended for the first or second semester of graduate study.

Limit — 15 students. Approval of instructor.

1501-606 Thesis Writing**3 sh**

Working closely with his research advisor, the student conducts a scholarly investigation and completes an acceptable Master's thesis.

Limit — 15 students.



ENVIRONMENTAL STUDIES

Graduate Advisor: Dr. W. Augustus Rentsch

Department Chairman: Dr. Harry H. Hoitsma

This interdisciplinary program leads to a Master of Arts degree, and provides both breadth and depth of preparation through three areas of study: (1) basic required courses designed to provide solid interdisciplinary cognitive foundations; (2) professional preparation courses to provide an understanding of change, implementation, and other factors through which the environmental problem-solving processes occur; and (3) a special emphasis component which provides opportunities for concentrated study in selected areas.

Admissions Requirements

The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program. Students with weak undergraduate preparation for environmental studies will be required to complete prerequisite courses at the undergraduate level and/or appropriate graduate level.

Requirements for the Master of Arts Degree in Environmental Studies

- | | | |
|-----|--|----------------------|
| I. | Basic Required Courses | 12 semester hours |
| | 4951-501 Environmental Studies — Physical | 3 |
| | 4951-502 Environmental Studies — Social and Behavioral | 3 |
| | 0401-570 Ecology | 3 |
| II. | Professional Preparation | 6 semester hours |
| | 4951-508 Environmental Problem-Solving | 3 |
| | 4951-509 Environmental Change and Communication..... | 3 |
| | Special Emphasis Component..... | 14-15 semester hours |
| | Select one of the following components: | |

- | | | |
|----|--|----|
| A. | Environmental Education | 15 |
| | 4951-551 Environmental Education | 3 |
| | 0824-503 Methods of Research..... | 3 |

Plus a selection of courses from the following and/or other multidisciplinary choices from other departments chosen with approval by the program director.

- | | | |
|----------|---|---|
| 4951-404 | Outdoor Teachings Sites (N.J. School of Conservation) | 3 |
| 4951-551 | Practicum in Environmental Education..... | 3 |
| 4951-555 | Curriculum Development in Environmental Education..... | 3 |
| 4951-601 | Research Project in Environmental Studies | 3 |

- | | | |
|----|----------------------------|----------------------|
| B. | Environmental Science..... | 14-15 semester hours |
|----|----------------------------|----------------------|

The selection of specific coursework in this component will be determined through consultation with the program director, will depend upon previous academic preparation in the sciences, and will include a 503 research experience in a selected discipline.

- | | | |
|----|----------------------------|----------------------|
| C. | Environmental Health | 14-15 semester hours |
|----|----------------------------|----------------------|
- An undergraduate major or minor in a health professions area is considered a basic admissions requirement.

Courses are selected from among the following:

0837-501	Selected Developments in Safety	3
0837-502	Determinants of Environmental Health.....	3
0837-503	Research Methods in Health.....	3
0837-516	Selected Developments in Community Health	3
0837-530	Seminar on Basic Issues in Health	3-6
0837-531	Independent Study in Health.....	3
0837-532	Air Pollution.....	3
0837-603	Research Project in Health	3

D. Environmental Cinematography..... 14-15 semester hours

A minimum of ten semester hours of appropriate coursework from an accredited fine arts program constitutes a basic requirement for admission.

The selection of specific coursework in this component will be determined through consultation with the program director and in conjunction with an advisor in the School of Fine and Performing Arts.

Note:

There is a three (3) semester hour residence requirement at Montclair State College's northern campus, the New Jersey State School of Conservation, Stokes State Forest.

Minimum — 32-33 semester hours

Environmental Studies

4951-501 Environmental Studies — Physical 3 sh

A systems concept utilizing physical science. Provides some understanding of the abiotic environment to life. The atmosphere, hydrosphere, and lithosphere are examined as natural, man-modified, and human environments.

4951-502 Environmental Studies — Social/Behavioral 3 sh

A systems concept utilizing social and behavioral sciences. Provides some understanding of the relationships of the cultural environment to life. The social and behavioral conditions upon the grouping of individuals are examined in natural and man-modified environments.

4951-503 Methods in Environmental Research 3 sh

An overview of the methodology of research in environmental science and an understanding of the problems of conducting such research: formulation of a research problem; use of reference materials; statistics; measurement; instruments of research; and writing the research report.

4951-508 Environmental Field Studies 3 sh

Field training to define environmental problems, synthesize data, and evaluate alternative solutions.

Prerequisite: Six semester hours of environmental studies or permission of instructor.

4951-509 Environmental Change and Communication 3 sh

Prepare students as professional environmentalists; communication and journalism strategies; theory of persuasion; and roles as catalyst, solution giver, process helpers, and resource person.

Prerequisite: 4953-501, 502, 550 or 508.

*The Environmental Studies Program is administered through the Department of Health Professions. See *Health Professions* for additional offerings.

- 4951-531 Independent Study in Environmental Studies** 1-4 sh
Student must develop statement of goals and phasing for completion, prior to consultation with instructor.
- 4951-550 Environmental Education** 3 sh
Foundations of environmental education: historical, theoretical, and conceptual. Includes models, gaming, encounters, and teaching strategies. A prerequisite course for all environmental education 500 level courses.
- 4951-551 Conservation Education** 3 sh
Provide background in natural resource management: wildlife; fisheries; forests; water and related components of spaceship earth. Includes field trips.
- 4951-554 Practicum in Environmental Education** 3 sh
Implementation of environmental education programs in both public and private institutions. Other emphasis depend upon student's needs.
Prerequisites: 4951-550, 4951-555 or permission of instructor.
- 4951-555 Curriculum Development in Environmental Education**
Development of environmental education curricula, courses of study, and instructional materials K-12.
Prerequisite: 4951-550.
- 4951-601 Research Project in Environmental Studies** 3 sh
To complete the research proposal initiated in the research methods course.
Prerequisite: Appropriate 503.
- 4951-404 Outdoor Teaching Sites for Environmental Education** 2 sh
Field-oriented course uses lecture, discussion and field activities; the integration of school sites into ongoing school curricula. Individualized and group project work on actual outdoor site development.
- 4951-495 Workshop Utilizing Natural Environments** 1 sh
Basic understanding of how natural environments may be used to supplement classroom experiences in natural science, social studies, humanities and outdoor pursuits. Does not meet resident requirement.
- 4951-496 Field Studies in Humanities and Natural Science** 1 sh
Provides an understanding of how the humanities and sciences, taught in natural environments, develop environmental sensitivity. Does not meet resident requirement.
- 4951-497 Field Studies in Social Studies and Outdoor Recreation** 1 sh
Provides an understanding of how outdoor pursuits and social studies may be taught, using natural environments, to develop environmental sensitivity.

FINE ARTS

Graduate Advisor: Dr. Peter Barnett

Department Chairman: Dr. Charles H. Martens

The graduate program in fine arts is designed to provide the committed artist, art teacher, art historian, or advanced layman with the opportunity to acquire further knowledge, skills and in-depth experience. The program allows for concentration in the area of the student's choice. Areas of specialization are offered in art education, art history, studies in the visual arts, and studio areas of painting, sculpture, graphics, crafts, photography and cinematography.

Studio courses are advanced courses and may be taken only with departmental permission. Although experience in the particular medium of the course is not required, a strong art background is necessary for success. Art history and philosophy courses are open to non-art majors.

Admission Requirements

The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program. Basic Professional Education requirements may be waived by the departmental advisor for non-teaching students.

Matriculation requires completion of a minimum of 36 semester hours in fine arts, including history and studio courses, or equivalent art studies at recognized institutions.

A portfolio of representative art work will be required as evidence of the applicant's ability. Advice concerning this requirement may be obtained from the department's graduate advisor.

The department may require one or more specified probationary courses prior to matriculation.

Requirements for the Master of Arts Degree in Fine Arts

I.	Required Courses	10 semester hours
	1003-590 Modern Philosophies of Art I.....	3
	1003-592 Selected Problems in Art History I.....	3
	1001-603 Seminar in Art I (with Graduate Project*)	2
	1001-604 Seminar in Art II (with Graduate Project*).....	2
	Six credits in Professional Education required for Art Education majors.	
II.	Art Electives	10-16 semester hours
	(subject to the approval of the graduate advisor)	
	0831-501 Contemporary Viewpoints in Art Education.....	3
	0831-502 Advanced Curriculum Construction in Art Education.....	3
	0831-505 Supervision and Evaluation in Art Education.....	3
	0831-506 Studio Techniques in Art Therapy	3
	1001-515 Graduate Life Drawing I.....	2
	1001-516 Graduate Life Drawing II	2
	1001-517 Graduate Life Drawing III	2
	1001-518 Graduate Life Drawing IV.....	2
	1001-570 Graduate Photography I.....	3
	1001-571 Graduate Photography II.....	3

* Required of all candidates except those who elect 1001-600 Master's Thesis.

1001-572	Graduate Photography III	3
1001-573	Graduate Photography IV.....	3
1001-600	Master's Thesis	4
1001-611	Individual Study I.....	2-8
1001-612	Individual Study II	2-8
1001-620	Field Course in Art I.....	2-6
1001-621	Field Course in Art II	2-6
1002-511	Graduate Painting I.....	2
1002-512	Graduate Painting II	2
1002-513	Graduate Painting III.....	2
1002-514	Graduate Painting IV	2
1002-521	Graduate Sculpture I	2
1002-522	Graduate Sculpture II	2
1002-523	Graduate Sculpture III	2
1002-524	Graduate Sculpture IV	2
1002-558	Lettering I	2
1002-559	Lettering II.....	2
1002-560	Graphic Design I	2
1002-561	Graphic Design II.....	2
1003-591	Modern Philosophies of Art II	3
1003-593	Selected Problems in Art History II	3
1003-594	Northern Renaissance Art	3
1090-547	Form in Fiber III (Graduate).....	3
1010-580	Graduate Cinematography I	3
1010-581	Graduate Cinematography II	3
1010-582	Graduate Cinematography III.....	3
1010-583	Graduate Cinematography IV.....	3
1090-525	Graduate Metalwork & Jewelry I	2
1090-526	Graduate Metalwork & Jewelry II	2
1090-531	Graduate Ceramics: Pottery & Sculpture I	2
1090-532	Graduate Ceramics: Pottery & Sculpture II	2
1090-533	Graduate Ceramics: Pottery & Sculpture III	2
1090-534	Graduate Ceramics: Pottery & Sculpture IV	2
1090-541	Form in Fiber I (Graduate)	3
1090-542	Form in Fiber II (Graduate)	3
1090-547	Form in Fiber I (Graduate)	3
1090-548	Form in Fiber IV (Graduate).....	3
1090-543	Graduate Decoration of Fabrics I	3
1090-544	Graduate Decoration of Fabrics II	3
1090-545	Graduate Decoration of Fabrics III.....	3
1090-546	Graduate Decoration of Fabrics IV.....	3
4921-552	Graduate Intaglio Printing I	3
4921-553	Graduate Intaglio Printing II	3
4921-566	Graduate Intaglio Printing III.....	3
4921-567	Graduate Intaglio Printing IV	3
4921-550	Graduate Screen Printing I	2
4921-551	Graduate Screen Printing II.....	2
4921-564	Graduate Screen Printing III	2
4921-565	Graduate Screen Printing IV	2

4921-556	Graduate Lithography I	2
4921-557	Graduate Lithography II	2
4921-554	Graduate Relief Printing I	2
4921-555	Graduate Relief Printing II	2
4921-574	Graduate Relief Printing III.....	2
4921-575	Graduate Relief Printing IV.....	2
III.	Basic Professional Education	6-9 semester hours
	May be waived for those in non-teaching areas.	
IV.	Free Electives	6-8 semester hours
V.	Final oral examination in relation to graduate project.	
	Minimum: 32 semester hours	

Course Descriptions

0831-501 Contemporary Viewpoints in Art Education 3 sh

The literature of the foundations of art education; readings selected from philosophy, the social and behavioral sciences, and the history of art education; implications of the developments in science and technology.

0831-502 Advanced Curriculum Construction in Art Education 3 sh

For students with interest in curriculum construction or revision, both in the elementary and secondary programs; evaluation of curricular materials in use in New Jersey and throughout the country in terms of principles of curriculum construction.

0831-505 Supervision and Evaluation in Art Education 3 sh

Supervisory methods and techniques for the experienced art teacher. Current and analogous supervisory data will be included. Will be based on state criteria and ways of evaluating from creative viewpoints.

Prerequisite: 3 years of teaching art.

0831-506 Studio Techniques in Art Therapy 3 sh

The development of a repertoire of art therapy skills in various media to facilitate meeting the expressive needs in art therapy settings.

Prerequisite: Acceptance into art therapy concentration.

1001-515 Graduate Life Drawing I 2 sh

Advanced problems in drawing based upon a study of the human figure.

Prerequisite: Eligibility for graduate program in fine arts.

1001-516 Graduate Life Drawing II 2 sh

Continuation of Graduate Life Drawing I.

Prerequisite: 1001-515.

1001-517 Graduate Life Drawing III 2 sh

Continuation of Graduate Life Drawing II.

Prerequisite: 1001-516.

1001-518 Graduate Life Drawing IV. 2 sh

Continuation of Graduate Life Drawing III.

Prerequisite: 1001-517.

1001-600 Master's Thesis I

A serious research project in art for the student finishing his course work.

Prerequisite: The ability to do advanced research in art as acknowledged by the department.

1001-603 Seminar in Art (with graduate project) I**2 sh**

An opportunity to make an extensive study in the field of art through the Fall and Spring semesters. The student examines and defines a problem and explores it in increasing depth and significance. The project may be a written document or a studio project. Students are advised to initiate these projects after completing at least two courses on a graduate level in the area of the project, and no more than 12 to 16 credits in their general program. Approval for 604 should be secured in the Spring and Summer session preceding Fall registration for the course. Approval is gained from:

- 1) the instructor as to competence in the medium, or background preparation.
- 2) a faculty member who will serve as personal advisor throughout the project.
- 3) the departmental graduate advisor who will conduct the 603, 604 seminar.

1001-604 Seminar in Art (with graduate project) II**2 sh**

Continuation of 1001-603.

1001-611 Individual Study I**2-8 sh**

Under this course designation advanced students may either expand or extend their experience in a chosen field or medium. Direction, conduct and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium.

Departmental permission; credits to be arranged.

1001-612 Individual Study II**2-8 sh**

Same as above.

Departmental permission; credits to be arranged.

1001-620 Field Course in Art I**2-6 sh**

Travel courses to art sources in the United States and foreign countries not to exceed 6 graduate credits. Contents and requirements will be set up as the courses evolve. First-hand contact with the historic art forms of the places visited and with artists and craftsmen. Each student selects an area of study in which the places visited have rich art resources. As preparation for the course, the student outlines his chosen study problem, reads background material, and lists sources he expects to utilize.

1001-621 Field Course in Art II**2-6 sh**

Same as above.

1001-511 Graduate Painting I**2 sh**

Studio in painting to further the creative expression and technical knowledge of the student in various painting media; personal and professional development through studio work, trips and the study of the contemporary artists.

Graduate prerequisites and permission of department.

1002-512 Graduate Painting II**2 sh**

Continuation of prerequisite: 1002-511.

1002-513 Graduate Painting III**2 sh**

Continuation of prerequisite: 1002-512.

- 1002-514 Graduate Painting IV** 2 sh
Continuation of prerequisite: 1002-513.
- 1002-521 Graduate Sculpture I** 2 sh
The student explores independently one or two materials and techniques, and begins to find his own directions as a sculptor.
Graduate prerequisites and permission of department.
- 1002-522 Graduate Sculpture II** 2 sh
Continuation of prerequisite: 1002-521.
- 1002-523 Graduate Sculpture III** 2 sh
Continuation of prerequisite: 1002-522.
- 1002-524 Graduate Sculpture IV** 2 sh
Continuation of prerequisite: 1002-523.
- 1002-556 Graduate Lithography I** 2 sh
From design and execution of master drawing to the finished print; first hand knowledge of tools, materials and techniques of the lithographic process; adaptation of the lithographic phase of printmaking to classroom use.
Graduate prerequisites and permission of the department.
- 1002-557 Graduate Lithography II** 2 sh
Continuation of prerequisite: 1002-556.
- 1002-558 Graduate Lettering I** 2 sh
Styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display and advertising layout; brief introduction to typography.
Graduate prerequisites and permission of the department.
- 1002-559 Graduate Lettering II** 2 sh
Continuation of prerequisite: 1002-558.
- 1002-560 Graduate Graphic Design I** 2 sh
Techniques and principles of design of printed matter and displays, elements of layout, illustration, typography, printing process, and preparation of copy for the printer.
Graduate prerequisites and permission of the department.
- 1002-561 Graduate Graphic Design II** 2 sh
Continuation of prerequisite: 1002-560.
- 1002-590 Modern Philosophies of Art I** 2 sh
Major writers in art in the nineteenth and twentieth centuries; the nature of the creative experience; art in the life of the individual and of society; the creative process; new materials; institutions and sentiments affecting current thinking in the field. Discussions based on readings of philosophers, poets, social scientists and psychologists. Fine arts major only, or permission of instructor.
- 1003-591 Modern Philosophies of Art II** 3 sh
The writings of 19th and 20th century artists and their interpreters; such works as the "Futurist's Manifesto" and Kandinsky's "The Spiritual in Art."
Fine arts major only, or permission of instructor.
- 1003-592 Selected Problems in Art History I** 3 sh
Art problems, iconographic topics and themes of a historic, social and philosophical nature. Topic selection will depend upon the special areas of the professor or guest professor invited for the semester.

- 1003-593 Selected Problems in Art History II** 3 sh
Continuation of prerequisite: 1003-592.
- 1003-594 Northern Renaissance Art** 3 sh
15th and 16th century paintings in northern Europe especially Flanders and Holland; the development of realism and style in relation to social change and the general ideas of the period, including contemporary music; Jan Van Eyck, Van der Weyden, Bosch, Peter Breughel and Matthias Grunewald.
- 1010-580 Graduate Cinematography I** 3 sh
Techniques, materials and theories of motion picture production for visually experienced students.
Prerequisite: Major or minor in fine arts or related area, or permission of instructor.
- 1010-505 The Film as Visual Art** 3 sh
Development of the motion picture as an art form. Viewing, analysis, reading and/or actual participation in the production of film images.
May be repeated for credit.
- 1010-581 Graduate Cinematography II** 3 sh
Continuation of Graduate Cinematography I.
Prerequisites: Major or minor in fine arts or related area, or permission of instructor.
- 1010-582 Graduate Cinematography III** 3 sh
Continuation of Graduate Cinematography II.
Prerequisite: Major or minor in fine arts or related area, or permission of instructor.
- 1010-583 Graduate Cinematography IV** 3 sh
Continuation of Graduate Cinematography III.
Prerequisite: Major or minor in fine arts or related area, or permission of instructor.
- 1011-570 Graduate Photography I** 3 sh
Provides for the in-depth study and practice of photography as a visual language. Encourages exploration beyond the camera through studio work, discussions, criticism, films, trips and demonstrations.
Prerequisite: Eligibility for graduate studio courses in fine arts.
- 1011-571 Graduate Photography II** 3 sh
Continuation of Graduate Photography I
- 1011-572 Graduate Photography III** 3 sh
Continuation of Graduate Photography II.
- 1011-573 Graduate Photography IV** 3 sh
Continuation of Graduate Photography III.
- 1090-525 Graduate Metalwork and Jewelry I** 2 sh
Designing jewelry and small sculpture in varied metals; the techniques of flat sheet metal and casting.
Graduate prerequisites and permission of the department.
- 1090-526 Graduate Metalwork and Jewelry II** 2 sh
Continuation of prerequisite: 1090-525.
- 1090-531 Graduate Ceramics: Pottery and Sculpture I** 2 sh
Experimentation with the potter's wheel; handbuilding methods of forming; further experimentation with clay compositions, glazes and methods of firing. Advanced

students will be responsible for developing craftsmanship and a personal idiom.

Prerequisites: Undergraduate experience in ceramics, portfolio, and instructor's approval.

1090-532 Graduate Ceramics: Pottery and Sculpture II 2 sh

Continuation of prerequisite: 1090-531.

1090-533 Graduate Ceramics: Pottery and Sculpture III 2 sh

Continuation of prerequisite: 1090-532.

1090-534 Graduate Ceramics: Pottery and Sculpture IV 2 sh

Continuation of prerequisite: 1090-533.

1090-541 Form in Fiber I (Graduate) 3 sh

Designing with simple and four harness floor looms, in a variety of techniques and materials.

Graduate prerequisites and permission of department.

1090-542 Form in Fiber II (Graduate) 3 sh

Continuation of prerequisite: 1090-541.

1090-543 Graduate Decoration of Fabric I 3 sh

Survey course in all aspects of fabric embellishment: tie-dye, batik, blockprint, tritik, discharge, silkscreen printing, 3-M matrix, etc.

1090-544 Graduate Decoration of Fabric II 3 sh

Continuation of studies in fabric embellishment techniques and materials.

Prerequisite: Graduate Decoration of Fabric I.

1090-545 Graduate Decoration of Fabric III 3 sh

Continuation of studies in fabric embellishment.

Prerequisite: Graduate Decoration of Fabric II.

1090-546 Graduate Decoration of Fabric IV 3 sh

Continuation of studies begun in fabric embellishment I, II, III.

Prerequisite: Graduate Decoration of Fabric III.

1090-547 Form in Fiber III Graduate 3 sh

Continuation of studies begun in Form in Fiber I and II.

Prerequisites: Form in Fiber II.

1090-548 Form in Fiber IV 3 sh

Continuation of studies begun in Form in Fiber I, II, III.

Prerequisites: Form in Fiber III.

4921-550 Graduate Screen Printing I 2 sh

The graphic art techniques of silk-screen from the creation of the master design through the construction of necessary printing facilities and printing; the use of tusche, glue, stencil lacquer, and photographic techniques.

Graduate prerequisites and permission of department.

4921-551 Graduate Screen Printing II 3 sh

Continuation of prerequisite: 4921-550.

4921-552 Graduate Intaglio Printing I 3 sh

Additional competency and depth of experience in etching, dry point, aquatint, and soft techniques. For art majors or other advanced art students.

Graduate prerequisites and department permission.

- 4921-553 Graduate Intaglio Printing II** 2 sh
Continuation of prerequisite: 4921-552.
- 4921-554 Graduate Relief Printing I** 2 sh
The woodcut and its relation to painting in color, size and richness; the cutting of various woods and veneers; printing approaches; inventiveness in using other materials in relation to wood. Lectures on prints of the past and field trips to important print collections and exhibits.
Graduate prerequisites and permission of department.
- 4921-555 Graduate Relief Printing II** 2 sh
Continuation of prerequisite: 4921-554.
- 4921-564 Graduate Screen Printing III** 2 sh
Continuation of prerequisite: 4921-551.
- 4921-565 Graduate Screen Printing IV** 2 sh
Continuation of prerequisite: 4921-564.
- 4921-566 Graduate Intaglio III** 3 sh
Continuation of Graduate Intaglio II.
- 4921-567 Graduate Intaglio IV** 3 sh
Continuation of Graduate Intaglio II.
- 4921-574 Graduate Relief Printing III** 2 sh
Continuation of prerequisite: 4921-555.
Prerequisite: Fine arts major or permission of instructor.
- 4921-575 Graduate Relief Printing IV** 2 sh
Continuation of prerequisite: 4921-574.



FRENCH

Graduate Advisor: Professor Madeleine Sergent
Department Chairman: Dr. Helene Klibbe

A graduate program in French is designed to prepare students for both teaching and research in language and literature.

A Master of Arts degree opens opportunities to teach in both community colleges and high schools, and provides a solid foundation for students interested in continuing their studies toward a Doctor of Philosophy degree. Graduate training in French is also increasingly useful for positions in government and industries concerned with French-speaking areas of the world.

Admission Requirements

Admission is open to students who hold a bachelor's degree and have completed at least 24 semester hours of undergraduate French or its equivalent. Students applying for admission are required to present their Graduate Record Examination scores for the Advanced Test in French in addition to the standard College requirements for admission to graduate study.

After acceptance, the candidates will consult the graduate advisor to plan their programs. The course program must be approved by the graduate advisor each semester, before registration.

Individuals holding the bachelor's degree and showing an adequate proficiency in French may enroll in graduate courses, even though they do not wish to enter the Master of Arts program.

Requirements for the Master of Arts Degree in French

I.	Required Courses	5 semester hours
	1102-505 History of the French Language	3
	1102-603 Research Seminar.....	2
	(Waived if student elects to write a thesis)	
II.	French Electives	21 semester hours
	1102-506 Advanced French Phonetics	3
	1102-511 Medieval French Literature	3
	1102-513 Medieval French Theater	3
	1102-516 Rabelais and Montaigne.....	3
	1102-517 Poetry of the Renaissance	3
	1102-525 Moralists of the Seventeenth Century.....	3
	1102-526 Corneille, Racine and Moliere.....	3
	1102-527 Descartes and Pascal	3
	1102-530 Philosophy and Politics in Eighteenth Century France (formerly Montesquieu and Voltaire)	3
	1102-531 The Development of the Novel in Eighteenth Century France (formerly Rousseau and the Precursors of Romanticism)	3
	1102-532 Eighteenth Century Seminar	3
	1102-537 Nineteenth Century French Theater.....	3
	1102-538 French Novel of the Nineteenth Century I	3
	1102-539 French Novel of the Nineteenth Century II.....	3

1102-540	Nineteenth Century French Poetry	3
1102-542	Twentieth Century French Theater	3
1102-543	Twentieth Century French Poets.....	3
1102-544	Twentieth Century French Novel I.....	3
1102-545	Twentieth Century French Novel II	3
1102-546	Contemporary French Novel	3

These courses will be offered on a rotating schedule to enable students to fulfill the requirements for a Master's degree within two years, summer sessions included.

- III. Free Electives6 semester hours
- IV. Thesis (optional) 4, on approval
- V. Comprehensive Examination: Two sessions of written examination covering French literature from the Middle Ages to the present, based on a reading list and subject matter covered in the program courses.

Minimum: 32 semester hours

Course Descriptions

- 1102-505 History of the French Language** 3 sh
Structures of modern French as outcome of linguistic and cultural processes over 2,000 years.
- 1102-506 Advanced French Phonetics** 3 sh
Principles of general and experimental phonetics. Previous knowledge of phonetics desirable.
- 1102-511 Medieval French Literature** 3 sh
French Literature from 9th through 15th centuries, emphasizing the "Chanson de Geste" and the "Roman Courtois."
- 1102-513 Medieval Theater** 3 sh
Origins and development of theater in France during the Middle Ages.
- 1102-516 Rabelais and Montaigne** 3 sh
Humanistic ideals as reflected in the works of Rabelais and Montaigne.
- 1102-517 Poetry of the Renaissance** 3 sh
Major works of Marot, Ronsard, du Bellay and other poets of the Pleiade.
- 1102-525 Moralists of the Seventeenth Century** 3 sh
Representative works of La Rochefoucauld, Mme. de Sevigne, Saint Simon and La Bruyere.
- 1102-526 Corneille, Racine and Moliere** 3 sh
Dramatic art as reflected in representative plays of the three authors.
- 1102-527 Descartes and Pascal** 3 sh
Their vision of the world and their impact on French literature.
- 1102-530 Philosophy and Politics in Eighteenth Century France** 3 sh
(formerly Montesquieu and Voltaire)
The impact of the "philosophes" on the revolution in religion and political and sociological thought.

- 1102-531 The Development of the Novel in Eighteenth Century France** **3 sh**
 (formerly Rousseau and the Precursors of Romanticism)
 Study of the social and historical context of a novel and its particular form (e.g. epistolary, episodic, etc.).
- 1102-532 Eighteenth Century Seminar** **3 sh**
 (formerly French Theater of the Eighteenth Century)
 Changing topics to include in-depth studies of individual authors and genre topics.
- 1102-537 Nineteenth Century French Theater** **3 sh**
 Hugo's dramatic theories and their application in representative plays.
- 1102-538 French Novel of the Nineteenth Century I** **3 sh**
 Insight into major works of Balzac and Stendhal.
- 1102-539 French Novel of the Nineteenth Century II** **3 sh**
 Insight into major works of Flaubert and Zola.
- 1102-540 Nineteenth Century French Poetry** **3 sh**
 Development of French poetry from Romanticism to Symbolism.
- 1102-542 Twentieth Century Theater** **3 sh**
 Major modern currents and trends in drama.
- 1102-543 Twentieth Century Poets** **3 sh**
 Within a general developmental context, emphasis upon thematic and structural analysis of work of Apollinaire, Reverdy, Char, Eluard and Bonnefoy.
- 1102-544 Twentieth Century Novel I** **3 sh**
 Evolution of the French novel: Proust, Gide and Mauriac.
- 1102-545 Twentieth Century Novel II** **3 sh**
 Literature engagee: Malraux, Sartre and Camus.
- 1102-546 Contemporary Novel** **3 sh**
 Directions of the French novel from the "nouveau roman" to the structuralist novel.
- 1102-603 Research Seminar** **2 sh**
 Opportunity to apply research techniques on a specific topic of the student's choice.
- 1503-536 The Romantic Movement** **3 sh**
 Comparative approach to the study of romanticism in England, Germany and France. (Taught in English. Recommended to French majors as a free elective.)

The following courses are offered as remedial work for students requiring supplementary language preparation. These courses carry no graduate credit. Course descriptions may be found in the current undergraduate bulletin.

- 1102-250 Advanced Composition
 1102-472 French Language Workshop

GEOSCIENCE

Graduate Advisor: Dr. Charles L. Hamilton

Department Chairman: Professor Richard Hodson

The graduate programs in geoscience are designed to enable the student to pursue further study in the various areas of the department for professional or personal reasons, to further his preparation for the teaching profession, or for a career requiring advanced training for teachers in the field.

For the arts and science student, a graduate program is designed to give opportunity for indepth study in the broad field of geoscience (geology). The program provides sufficient flexibility through electives so that emphasis in (1) metamorphic and igneous geology, (2) sedimentology and paleontology, or (3) oceanography and marine geology is possible. Some of the latter courses will be taken at the various sites of the New Jersey Marine Sciences Consortium.

Admission Requirements

Prior to matriculation the student should have completed a subject matter background of at least twenty-four semester hours in the area of specialization, as well as a sufficient background in related sciences and basic mathematics. In cases of a weak undergraduate background, prerequisite courses, not for graduate credit, may be assigned.

Candidates must fulfill the other criteria for graduate matriculation as listed in this bulletin (Admission to Graduate Study). Each candidate's background and credentials must be received and approved by the graduate advisor for the department.

Requirements for the Master of Arts Degree in Geoscience

Thirty-two semester hours are required, of which up to 8 may be at the 400 level. Additional 400 level courses will not be given credit without written approval of the department graduate advisor. Additional hours may be required to compensate for any deficiencies in the applicant's undergraduate record.

Degree candidates employed in the field of education may use six semester hours of free electives for graduate courses in the area of professional education.

I. Required Courses	9-12 semester hours
A. 1914-537 Biostratigraphy of New Jersey	4
1914-506 Advanced Invertebrate Paleontology.....	4
1914-512 Paleocology	3
B. 1914-503 Advanced Physical Geology	4
1914-504 Advanced Historical Geology	3
1914-571 Geophysics.....	3
C. 1914-518 Petrography	4
1914-543 Advanced Mineralogy.....	3
1914-545 Optical Mineralogy.....	4
II. Geoscience Electives.....	11-13 semester hours
III. Research Requirement	
1914-650 Thesis	4

IV. Free Electives6 semester hours

V. Comprehensive Examination

Minimum: 32 semester hours

Course Descriptions

(Courses listed are not necessarily offered every year)

1914-503 Advanced Physical Geology 4 sh

In-depth study of the major problems of physical geology: processes of erosion, rock formation, continent and ocean-basin origin and relationships, earthquakes, interior of the earth, vulcanism, island arcs, mountain building, paleomagnetism, continental drift, and sea-floor spreading. Field trips.

Prerequisite: Physical Geology and 8 additional hours of geoscience at 400 level (2 hours lecture, 4 hours laboratory).

1914-504 Advanced Historical Geology 3 sh

In-depth analysis of major problems in geologic history, stratigraphy and paleoenvironments as interpreted through lithologic and paleontologic evidence. Required field trips.

Prerequisite: Stratigraphy (2 hours lecture, 2 hour laboratory).

1914-537 Biostratigraphy of New Jersey 3 sh

The geologic history, paleontology, stratigraphy and paleogeography of New Jersey. Required field trips.

Prerequisites: Paleocology or permission of the instructor (2 hours lecture, 2 hours laboratory).

1914-546 Petrography 4 sh

Rock textures, structures and mineralogy using the polarizing microscope. Identification and classification of rocks and the origin and history of the rock as determined by microscopic study of thin sections. Required field trips.

Prerequisites: Petrology and Optical Mineralogy (3 hours lecture, 2 hours laboratory).

1914-530 Paleocology 3 sh

Principles: distribution and association of fossils as interpreted from the evidence presented in the geologic record. Detailed paleoecological field study made of selected faunal assemblages.

Prerequisite: Invertebrate Paleobiology (2 hours lecture, 2 hours laboratory).

1914-533 Advanced Invertebrate Paleobiology 4 sh

Fossil invertebrates with emphasis on their evolutionary, paleoecologic and stratigraphic significance. Laboratory and field work stresses collecting, preparation, identification and curatorial and faunal analysis techniques. Required field trips.

Prerequisite: Invertebrate Paleobiology or undergraduate biology major sequence or the permission of the instructor (3 hours lecture, 2 hours laboratory).

1914-535 Vertebrate Paleobiology 3 sh

The geologic history, morphology, taxonomy, paleogeography and evolution of fossil vertebrates. Required field trips.

Prerequisites: Historical Geology, Vertebrate Zoology and one other course in vertebrate anatomy or permission of the instructor (2 hours lecture, 2 hours laboratory).

1914-536 Paleobotany**3 sh**

The taxonomy, morphology, evolution, paleoecology and stratigraphic significance of fossil plants. Required field trips.

Prerequisite: Historical Geology and General Botany or permission of the instructor (2 hours lecture, 2 hours laboratory).

1914-538 Sedimentary Petrography**4 sh**

The interpretative study of the structures, textures, composition and genesis of sedimentary rocks. Laboratory analyses of sediments and sedimentary rocks by optical, mechanical and chemical methods and the graphical representation of the resultant data.

Prerequisites: Sedimentology and Optical Mineralogy (3 hours lecture, 2 hours laboratory).

1914-543 Advanced Mineralogy**3 sh**

Chemical and physical principles as applied to minerals. Detailed study of representative minerals from the various families. Advanced techniques will be performed by the student. Field trips.

Prerequisite: Mineralogy or permission of instructor (3 hours lecture).

1914-545 Optical Mineralogy**4 sh**

Theory and practice of using the polarizing microscope to study and identify minerals; theory of light transmission in minerals; the practical effect. Required field trips.

Prerequisite: Mineralogy (3 hours lecture, 2 hours laboratory).

1914-558 Coastal Geomorphology**4 sh**

Coastlines and their evolution. Processes and materials of the coastal zone. Shore zone hydrodynamics and sedimentation. Beach and barrier systems with special emphasis on the New Jersey shoreline. Also offered at the field stations of the New Jersey Marine Sciences Consortium.

Prerequisites: 12 hours of geoscience including geomorphology or permission of the instructor (3 hours lecture, 2 hours laboratory).

1914-560 Advanced Marine Geology**3 sh**

Development and evolution of the ocean basins; marine sedimentation; shoreline development and classification; submarine topography; mineral resources of the sea. Laboratory analysis of marine sediments and fossil assemblages. Required field trips.

Prerequisite: Physical Geology and one 400 course in Marine Geology or Oceanography (2 hours lecture, 2 hours laboratory).

1914-571 Geophysics**3 sh**

Theory and application of conventional geophysical methods: seismology, magnetism, electricity and gravity. Laboratory includes the collection and interpretation of geophysical data. Field trips.

Prerequisites: Physical Geology 2 semesters each of College Physics and Calculus (3 hours lecture).

1914-572 Tectonics**3 sh**

The major structures of the Earth, the principle of isostasy, mountain-building, continental drift, sea-floor spreading, and possible causes of tectonism in the Earth. The methods of study, results obtained, interpretation of the data and the latest theories of tectonism. Required field trips.

Prerequisites: Physical Geology or Principles of Geology, and College Physics (3 hours lecture).

1914-573 Nuclear Geophysics **3 sh**

Principles and application of nuclear physics to study of Earth, including: natural radiation; origin and occurrence of isotopes; use of isotopes in prospecting, geochronology and space geology; paleotemperature determinations; activation analysis; mining and use of radioactive elements; nuclear energy.

Prerequisites: Advanced Physical Geology or Advanced Historical Geology, 1 year college Physics (2 hours lecture, 2 hours laboratory).

1914-575 Geochemistry **3 sh**

Chemical laws and principles applied to the Earth: chemical composition of the Earth, distribution and relative abundance of the elements. Use of isotopes in geology and the application of chemical principles to geologic processes. Study of meteorites included. Required field trips.

Prerequisites: General Chemistry, Petrology (3 hours lecture).

1914-578 Igneous and Metamorphic Geology **4 sh**

The interpretative study of igneous and metamorphic rocks in detail with the aim of properly identifying and naming the rocks and interpreting their history; rock suites from classical areas. Required field trips.

Prerequisites: Optical Mineralogy, Petrology (3 hours lecture, 2 hours laboratory).

1914-580 Field Geology **4 sh**

The principles and techniques of geologic field work. Independent and team mapping of local areas of geologic interest using modern field methods and instruments.

Prerequisites: 12 hours of 400 level geology (3 hours lecture, 2 hours laboratory).

1914-695 Thesis **4 sh**

In-depth field, laboratory and library investigation of a problem in the area of the student's interest in geoscience; results will be presented in oral and written form culminating in a written thesis.

Prerequisite: Matriculation for the MA degree in geoscience.

The following Senior-Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
1914-410 Geology of New Jersey.....	3
1914-431 Invertebrate Paleobiology.....	4
1914-434 Stratigraphy	4
1914-437 Sedimentology	4
1914-443 Mineralogy	4
1914-444 Petrology.....	4
1914-457 Meteorology	4
1914-460 Introduction to Physical Oceanography	4
1914-464 Geology of the Oceans	4
1914-465 Coastal Marine Geology.....	4
1914-466 Field Methods in Oceanography and Marine Biology.....	1

1914-467	Dynamic Beach Processes	1
1914-468	Tidal Marsh Sedimentation.....	2
1914-469	Independent Study in the Marine Sciences	1-4
1914-472	Structural Geology	3
1914-480	Field Studies in Geoscience.....	4
1914-484	Geology Field Trip	1
1914-490	Seminar	2
1914-495	Independent Study in Geoscience	1-4

HEALTH EDUCATION

Graduate Advisor and Department Chairman: Dr. Harry H. Hoitsma

The graduate program, leading to a Master of Arts degree, provides advanced study for candidates engaged in or seeking added preparation for positions in school and community health education programs. Essential aspects of the program include required as well as selected elective courses in the Department of Health Professions, interdisciplinary coursework, and a research experience culminating in the completion of a major project and an oral examination. All students are required to complete a comprehensive written examination prior to the research experience.

The variety of educational experiences provided in the program is offered in an effort to prepare school and community health educators for the health challenges of the future. The development of a historical perspective is provided along with an emphasis on specific contemporary health problems. The analysis of recent developments in health education combines with the interpretation of important scientific advancements to form the foundational basis of this program.

Admission Requirements

A major or minor in health education from an accredited college or university constitutes a minimum requirement for admission. Exception to this requirement can be made in the health education program for candidates with degrees in closely related areas. A candidate for the Master of Arts degree in Health Education should consult the appropriate graduate advisor before matriculation. The student with a minor or less preparation in health education must undertake designated prerequisites as part of his program. The student with a major in health education may be requested to undertake additional work where deficiencies are apparent. The prerequisite requirements will be in addition to the minimum 32 semester hour work program.

Requirements for the Master of Arts Degree in Health Education

I. Basic Professional Education	6-9 semester hours
0837-503 Research Methods in Health	3
II. Specialization	12-20 semester hours
A. Core Courses Required of All Candidates.....	12 semester hours
0837-526 Curriculum Development in Health Education.....	3
0837-528 Evaluation in Health	3
0837-535 History and Foundations of Health I or	
0837-536 History and Foundations of Health II	3
0837-603 Research Project in Health (Required of all	
candidates except those who enroll for	
0826-650, Research Seminar and Thesis	
Writing).....	3
B. Health Education Electives	0-8 semester hours
The selection of health education electives will be determined through advise-	
ment and will be based on the professional objectives of the candidate.	
III. Free Electives	4-9 semester hours
Minimum: 32 semester hours	

Note:

1. No more than two 400-level courses may be completed for credit in the field of specialization; no more than 25 per cent of total requirements at 400 level.
2. Driver education cannot be taken for credit in the health education curriculum.
3. Candidates who do not complete course 0837-603, Research Project in Health, at the conclusion of one semester, will be required to re-register for 0837-603 to complete the project.

Course Descriptions**0836-501 Selected Developments in Safety 3 sh**

Selected aspects of safety, including major areas: home, industrial, public and transportation. Community's role in promoting a safe environment.

Prerequisite: A basic course in safety or the equivalent.

0837-500 Health Aspects of Family Living 2 sh

The family in contemporary society and alternatives to the traditional family, including health aspects of reproduction, heredity, growth and development.

Prerequisite: A basic course in health education.

0837-502 Determinants of Environmental Health 3 sh

Advanced study of health and safety aspects of the environment: air, water, industrial pollution and the impact of expanding population on health problems.

Prerequisite: A basic course in environmental health or permission of advisor.

0837-503 Research Methods in Health 3 sh

A course designed to provide the students with the theoretical and practical experiences in methods of inquiry, designing of research studies, utilization of various tools for gathering data, statistical analysis of data, and writing of research proposals.

0837-505 School Health Program Management 3 sh

Examines the various aspects of management theory pertinent to school health programs. Guiding principles and philosophical considerations of theory and practice are also reviewed. Includes management techniques, staffing patterns and accounting procedures essential for the successful school health program. Evaluative devices are analyzed and reviewed to determine the effectiveness of the total program.

Prerequisite: Master's degree candidates in Health Education only.

0837-510 Health Education Workshop 3 sh

For teachers of health education; deeper understandings of subject matter, current methods and techniques for the classroom, and considerations for curriculum development.

Prerequisite: Undergraduate preparation in health education or in a related field of study.

0837-512 Alcohol Education Workshop 3 sh

Current teaching materials, techniques and approaches in the alcohol education programs in schools and communities: physiological, psychological, sociological, legal, economic, religious, safety, and rehabilitative aspects.

Prerequisite: 0837-301 Addictions and Dependencies or 0837-413 The Drug Abuse Problem, or permission of advisor.

0837-513 Drug Abuse Seminar**3 sh**

Advanced study in selected aspects of drugs: recent pharmacological, legal, economic and rehabilitative developments. Emphasizes individual project approach.

Prerequisite: 0837-301 Addictions and Dependencies or 0837-413 The Drug Abuse Problem or permission of advisor.

0837-514 Venereal Disease Education**3 sh**

Workshop emphasizing pathology, epidemiology, treatment and prevention of venereal disease. Includes consideration of school and community program development.

Prerequisite: A basic course in health or permission of advisor.

0837-516 Selected Developments in Community Health**3 sh**

Advanced study of aspects of community health: recent developments in air and water pollution, waste disposal and sanitation, and communicable disease protection.

Prerequisite: A basic course in community health or permission of the advisor.

0837-526 Curriculum Development in Health Education**3 sh**

Nature and construction of comprehensive health education curricula, elementary grades through senior high school. Recommended for health education majors only.

Prerequisite: Basic course in health education and basic course in methods of teaching health education.

0837-528 Evaluation In Health**3 sh**

Measurement and evaluation processes relating to health in schools and communities: examination and development of research instruments to evaluate behavior, knowledge and attitudes; interpretative and administrative factors involved in the evaluation process.

Prerequisite: A basic course in statistics or in tests and measurement.

0837-530 Seminar in Basic Issues in Health**3 sh**

Contemporary health topics and problems are identified, interpreted and critically analyzed for development of deeper insights and understanding of the basic issues; individual or group research project.

0837-531 Independent Study in Health**2-4 sh**

Under the direction of departmental faculty member. Semester hours determined by department chairman following consultation with departmental research committee. For students in health professions only.

0837-532 Air Pollution**3 sh**

A consideration of the diverse factors contributing to air pollution, the physiological responses of critical organs to air pollutants, public health and economic implication, air pollution control standards and legislation, and principles of monitoring devices.

Prerequisite: General Chemistry, Anatomy and Physiology.

0837-535 History and Foundations of Health I**3 sh**

Comprehensive historical study of our continual struggle against the forces of disease and infirmity. Includes health and medical practices of primitive peoples, ancient civilizations, the Middle Ages, and the Renaissance.

Prerequisite: For health professions majors or with permission of the departmental advisor.

0736-536 History and Foundations of Health II**3 sh**

Comprehensive historical study of health and medical practices beginning with the

seventeenth century and extending through the twentieth century. Major health science discoveries are identified and the development of school health education is considered.

Prerequisite: For health professions majors or with permission of the departmental advisor.

0837-603 Research Project in Health

3 sh

Provides an intensive research experience for Master's degree candidates in health education. It reflects the culmination of coursework and involves the completion of a research document. All candidates must satisfactorily complete an oral examination based on the research experience.

Prerequisites: 0837-503 Research Methods or 0824-503 Methods of Research,
0837-528 Evaluation in Health, and

Successful completion of the departmental comprehensive examination

The following Senior-Graduate courses may be elected with approval of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

0837-411	School Health Services	3
0837-413	Drug Abuse Problem	3
0837-445	Perspectives on Death.....	3
0837-460	Systems of Health Services Delivery	3

HOME ECONOMICS

Graduate Advisor and Department Chairman: Dr. Katharine B. Hall

The graduate program in home economics leads to the degree of Master of Arts in Home Economics. Individual programs can be structured from the courses offered to provide advanced specialized training needed for college and university teaching, for leadership positions in the various professions in business, for social welfare agencies, for public schools and adult education programs, for research and for extension services.

Admission Requirements

Requirements for admission to graduate study are prescribed by the Graduate Division. A program is developed for each student depending on his or her individual professional goals. Students lacking adequate preparation may be required to take additional courses at the undergraduate level as prerequisites to graduate study.

Requirements for the Master of Arts Degree in Home Economics

I. Required Courses	11 semester hours
1301-500 Contemporary Issues in Home Economics.....	2
1301-507 Research in Home Economics	3
1301-509 Research Seminar.....	3
1301-540 Interdisciplinary Study of the Family	3

II. Professional Emphasis	9 semester hours
---------------------------------	------------------

Select from one of the following groups:

A. Home Economics Education

1301-501 Seminar in Home Economics Education	3
1301-503 Program Development in Family Life Education	3
1301-506 Supervision of Home Economics.....	3
1301-403 Consumer Education Techniques.....	2
1301-404 Evaluation in Home Economics	3

B. Home Management — Consumer Economics

1301-403 Consumer Education Techniques.....	3
1301-530 Consumer Behavior.....	3
1301-531 Family Financial Problems.....	3
1301-532 Family and Consumer Economics.....	3
1301-535 Consumer and Family Law	3
1301-560 Housing the Family.....	3
1301-570 The Management of Family Resources.....	3
1301-571 Problems Solving in Family Counseling.....	3
1301-572 Management Seminar	3

C. Family Relations — Child Development

1301-503 Program Development in Family Life Education	3
1301-514 The Child in the Family.....	3
1301-542 Dynamics of Family Interaction	3
1301-544 Intercultural Study of the Family	3
1301-445 The Inner City Family	3

III. Home Economics Electives..... 3-9 semester hours

Each 500 level course has as its prerequisite a course satisfactorily completed within the last 5 years in the same area of study on the graduate or undergraduate level.

1301-501	Seminar in Home Economics Education.....	3
1301-503	Program Development in Family Life Education.....	3
1301-508	Independent Study.....	1-3
1301-514	Child in the Family	3
1301-520	Clothing and Human Behavior.....	3
1301-530	Consumer Behavior	3
1301-531	Family Financial Problems.....	3
1301-532	Family and Consumer Economics	3
1301-535	Consumer and Family Law.....	3
1301-542	Dynamics of Family Interaction.....	3
1301-544	Intercultural Study of the Family	3
1301-560	Housing the Family.....	3
1301-570	The Management of Family Resources.....	3
1301-571	Problem Solving in Family Counseling	3
1301-572	Management Seminar	3
1301-580	New Findings in Nutrition.....	3
1301-403	Consumer Education Techniques	3
1301-404	Evaluation in Home Economics.....	3
1301-408	Workshop in Home Economics.....	3
1301-445	The Inner City Family.....	3

IV. Free Electives.....3-9 semester hours

V. Comprehensive Examination, both oral and written, to be taken after completing 24 semester hours of graduate work.

VI. Candidates who choose to write a thesis will register for Graduate 600 for four semester hours credit in lieu of 1301-509 Research Seminar.

Minimum: 32 semester hours

Course Descriptions

1301-501 Seminar in Home Economics Education **3 sh**
 Identifying the issues in home economics education at all levels. Trends as a basis for managing, change in curriculum, and teaching. Each participant will design a project and plans for implementation.
 Prerequisite: 1301-500

1301-503 Program Development in Family Life Education **3 sh**
 Analysis of the development of family living programs in public schools and other agencies. Current problems, practices, and trends. Designing and planning for the implementation of innovative programs.

1301-506 Supervision of Home Economics**3 sh**

Curricula, current trends, facilities, professional literature and evaluation techniques. Competencies for the role of supervisor analyzed. Provides elective credits toward Supervisor's Certificate.

Prerequisite: Classroom teaching experience.

1301-507 Research in Home Economics**3 sh**

Designed to provide basic research and statistical literacy so that students can develop a research proposal in its entirety in any one area of home economics.

Prerequisite: 1301-304 Intro to Research or equivalent or permission of instructor.

1301-508 Independent Study**1-3 sh**

An opportunity to study in depth, areas of home economics which are not offered in the regular curriculum. Approval of Department Chairman required.

1301-509 Research Seminar**3 sh**

Library or experimental research on specific problems of limited scope. Work may be taken in the following areas: child and family, family and consumer studies, family housing, foods, nutrition, textiles, clothing or home management.

Prerequisite: 1301-507 Research in Home Economics

1301-514 Child in the Family**3 sh**

An intensive study of the theories and research related to child rearing techniques; analysis of factors influencing parental practices and their effects on the child.

1301-520 Clothing and Human Behavior**3 sh**

Analysis of factors affecting appearance and satisfaction in clothing. Economic, sociological and psychological aspects of clothing in relation to the individual.

1301-530 Consumer Behavior**3 sh**

Investigating family consumer behavior as affected by individual perception, motivation and personality, family organization, social class, subcultures and economic conditions of the nation. Models of consumer behavior evaluated.

1301-531 Family Financial Problems**3 sh**

Study of families with financial concerns and crises. Emphasis on effective use of money to meet families' life styles and alleviate problem areas.

1301-532 Family and Consumer Economics**3 sh**

Study of families and consumers from economic perspectives in society. Emphasis on broad implications of economic practices and policies for various groups of families as they function in the marketplace.

1301-535 Consumer and Family Law**3 sh**

Laws and policies of institutions which affect family functions, relationships and welfare.

1301-540 Interdisciplinary Study of the Family**3 sh**

Contributions various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make towards a more comprehensive understanding of family life.

1301-542 Dynamics of Family Interaction**3 sh**

Critical review of concepts and theories, both psychological and sociological, currently used in understanding patterns and problems of family relationships.

1301-544 Intercultural Study of the Family **3 sh**
 Analytical study of cross cultural regularities and differentials in family structures. Functions and impact of social change on family values and patterns. Varied conceptual approaches to the study of family as well as a broad acquaintance with empirical studies and research.

1301-560 Housing the Family **3 sh**
 Analysis of location, structure, design, furnishings and equipment as a setting for the physical and emotional development of the individual and the family.

1301-570 The Management of Family Resources **3 sh**
 Family as a decision-making unit. Directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on family's ability to maximize its resource potential and utilization.

1301-571 Problem-Solving in Family Counseling **3 sh**
 Counseling families in problem-solving on resource use, including the resources of time, energy, attitudes and material and non-material goods and services.

1301-572 Management Seminar **3 sh**
 Application of personal management concepts to one's professional role with the goal of developing more effective ways of handling professional situations and responsibilities.

1301-580 New Findings in Nutrition **3 sh**
 Recent developments in nutrition and a critical review of fundamentals.

The following Senior-Graduate courses are available as electives with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
1301-403 Consumer Education Techniques	3
1301-404 Evaluation in Home Economics.....	3
1301-408 Workshop in Home Economics.....	3
1301-445 The Inner City Family.....	3

INDUSTRIAL EDUCATION AND TECHNOLOGY

Graduate Advisor: Dr. Arthur W. Earl

Department Chairman: Dr. George Olsen

Graduate study in industrial education and technology is designed to improve the professional training of industrial education teachers, to enhance their teaching proficiency through study of trends and developments in the fields, to improve the organization of the industrial arts laboratory and to provide a basis for work in administration and supervision. Emphasis is given to advanced work in industrial education and related fields which broaden professional experiences and accent industrial concepts.

Graduate programs of students matriculated in the department are tailored to the individual's needs through consultation with the graduate advisor.

Graduate students matriculated in the Master of Arts degree program who desire certification as a Supervisor of Industrial Education or as a Coordinator of Cooperative Industrial Education can arrange their programs with the graduate advisor.

Admission Requirements

Study toward the Master of Arts degree in industrial education and technology presupposes the completion of an undergraduate major in the same area. Individuals who have undergraduate majors in this area, but do not wish to work toward a degree, may enroll in graduate courses in the department.

Requirements for the Master of Arts Degree in Industrial Education and Technology (32 Semester Hours)

- | | | |
|------|---|---------------------------|
| I. | Basic Professional Education | 6 semester hours minimum |
| | 0824-503 Methods and Instruments of Research..... | 3 |
| II. | Free Electives | 2 semester hours minimum |
| III. | Industrial Education Specialization | 20 semester hours minimum |
| A. | Professional Required | 12 |
| | 0996-502 Curriculum Construction and Course Organization in
Industrial Education | 3 |
| | 0996-509 Industrial Education Facilities Planning..... | 3 |
| | 0996-607 Research Seminar in Industrial Education (Full Year) | 6 |
| B. | Professional Electives | 3-9 semester hours |
| | 0996-501 Historical and Contemporary Industrial
Education Literature..... | 3 |
| | 0996-503 Contemporary Problems in Industrial Education | 3 |
| | 0996-504 Instructional Materials in Industrial Education | 3 |
| | 0996-505 Supervision of Industrial Education | 3 |
| | 0996-606 Independent Studies in Industrial Education I, II, III | 1-3 |
| C. | Department Electives | |
| | Laboratory Electives | 0-6 semester hours |

0990-411	Design in Industry.....	3
0990-422	Engineering Graphics	3
0990-423	Architectural Design and Engineering	3
0990-431	Offset Lithography	3
0990-432	Advanced Offset Lithography	3
0990-433	Color Photography.....	3
0990-434	Color Separation	3
0990-441	Wood Technology	3
0990-442	Residential Construction.....	3
0990-451	Plastic Technology	3
0990-452	Plastics Mold and Form Design-Development and Production	3
0990-461	Management & Production Technology	3
0990-466	Welding Technology.....	3
0990-471	Electronic Circuit Application	3
0990-472	Industrial Electronic Circuits	3
0990-482	Fluid Power	3
0990-483	Fluidics.....	3
0990-484	Alternative Energy Conversion Systems.....	3
0990-491	Construction Technology.....	3
0990-492	Manufacturing Technology	3
0990-497	Historical Restoration.....	1-9
0990-498	National/International Work Study in Technology	1-9
	Field Experiences	
0990-408	Field Studies of Industry	2
0990-409	Cooperative Industrial Work Experience	2

Note: 497 and 498 cannot be taken for more than 6 semester hours credit in the Master of Arts Program.

Note: Senior-Graduate course descriptions may be found in the current undergraduate bulletin.

- IV. Thesis: Each candidate for this program will select a thesis topic, thesis advisor and thesis committee (minimum of two). An oral exam will be given over the completed thesis (4 semester hours).

Requirements for the Master of Arts Degree in Industrial Education and Technology (36 Semester Hours)

Identical to the 32 semester hour program above with the following exceptions:

- II. Free Electives.....6 semester hours minimum
- III. Industrial Education Specialization.....24 semester hours minimum
- IV. Comprehensive Examination: Written examination, scheduled during both semesters, required of all candidates for the Master of Arts degree.

Certification

The department offers three forms of certification through the Graduate Division.

1. Industrial Arts Supervisor

2. Cooperative Industrial Education Coordinator
3. Post-Baccalaureate certification

For more details, see certification section of this catalog or contact the graduate advisor in Industrial Education and Technology.

Course Descriptions

- 0996-501 Historical and Contemporary Industrial Education Literature** 3 sh
Material surveyed for applicability to laboratory teaching and professional improvement: historical writings, research literature, materials provided by corporations and government agencies and pertinent reference works.
- 0996-502 Curriculum Construction & Course Organization in** 3 sh
Development of industrial education courses of study and instructional materials.
- 0996-503 Contemporary Problems in Industrial Education** 3 sh
Seminar group exploration of a current problem or issue in contemporary industrial education; a research, discussion, presentation format.
- 0996-505 Supervision of Industrial Education** 3 sh
Principles and practices discussed and evaluated in relation to supervisory techniques, budget supplies, inventories, maintenance, safety and upgrading of in-service teachers.
- 0996-509 Industrial Education Facilities Planning** 3 sh
Planning and equipment selection: practical application of architectural aspects, floor plan layouts, equipment selection, bid preparation and two- or three-dimensional models.
- 0996-606 Independent Study in Industrial Education I, II, or III** 1-3 sh
Advanced individual study on problems beyond what can be accomplished in the classroom. Credit may be obtained for an approved industrial course or seminar related to the student's special area of interest. May be taken three times, with the graduate advisor's approval, for a total of three semester hours.
Prerequisite: Application through department office prior to registration; 0824-503.
- 0996-607 Research Seminar in Industrial Education** 6 sh
A survey of industrial research, technical reports, centers, institutes, laboratories and material standards. Also, the undertaking of an industrial research and development problem, reflecting the graduate students' area of concentration, and the preparation of a publishable technical report. To run a full academic year from September to June.
Prerequisite: 0824-0503.
- 0997-501 Principles & Philosophy of Cooperative Industrial Education** 3 sh
Historic, cultural, social, governmental, economic and technical forces which affect development of cooperative industrial education programs.
- 0997-502 Curriculum Construction in Cooperative Industrial Education** 3 sh
Techniques designed to meet needs of related and laboratory teaching, and school work programs; curriculum materials especially adapted to needs of part-time cooperative trade occupational programs.
- 0997-503 Problems in Organizing & Teaching Cooperative** 3 sh
Various practices for coordinating high school programs with needs of local industry. Emphasis on supervisory responsibilities within the school and cooperation required with public and private agencies.

0826-582 Vocational Guidance and Occupational Information**3 sh**

See interdisciplinary course description under Student Personnel Services.

The following Senior-Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

0990-408	Field Studies of Industry.....	2
0990-409	Cooperative Industrial Work Experience I, II or III	2
0990-411	Design in Industry	3
0990-422	Engineering Graphics.....	3
0990-423	Architectural Design and Engineering.....	3
0990-431	Offset Lithography.....	3
0990-432	Advanced Offset Lithography	3
0990-433	Color Photography	3
0990-434	Color Separation	3
0990-441	Wood Technology	3
0990-442	Residential Construction	3
0990-451	Plastic Technology	3
0990-452	Plastics Mold & Form Design-Development & Production.....	3
0990-461	Management & Production Technology.....	3
0990-471	Electronic Circuit Applications	3
0990-472	Industrial Electronic Circuits.....	3
0990-482	Fluid Power.....	3
0990-483	Fluidics	3
0990-484	Alternative Energy Conversion Systems	3
0990-491	Construction Technology	3
0990-492	Manufacturing Technology.....	3
0990-497	Historical Restoration	1-9
0990-498	National/International Work Study in Technology.....	1-9



MATHEMATICS

Graduate Advisor: Dr. William Parzynski

Department Chairman: Professor Robert Garfunkel

To meet the needs of graduate students interested in extensive study of mathematical theory or application, the department offers Master of Arts degrees in Pure and Applied Mathematics, Computer Science, and Statistics. To meet the needs of the teacher of mathematics, the department offers a Master of Arts degree in Mathematics Education, which is a special combination of courses in mathematics and mathematics education.

Admission Requirements

A candidate for the Master of Arts degree in mathematics must consult the graduate advisor of the mathematics department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of 32 semester hours of work, is prepared in consultation with the graduate advisor. At least 24 semester hours of the Master of Arts program should be at the 500 level. Changes in the work program are made only with the written approval of that advisor.

The candidate for the Master of Arts degree must present an undergraduate major of at least 30 semester hours in mathematics. Courses in engineering and science that have a substantial mathematical content may be submitted toward this requirement. Candidates whose undergraduate preparation is deficient in either depth or breadth may be required to complete certain prerequisites which will not carry graduate credit.

Requirements for the Master of Arts Degree in Mathematics (Pure and Applied)

- I. Required: Two one-year courses selected as follows:12 semester hours
 Analysis: 1701-521, 522 or 1701-526, 526
 Algebra: 1701-531, 532 or 1701-535, 536
- II. Mathematics Electives14 semester hours
 Courses selected from: 1701-520 to 569 or
 1701-580 to 589 or
 1701-420 to 465
 with at least 12 semester hours at the 500 level. Students must elect 425 and 426 if not previously taken.
- III. Free Electives6 semester hours
- IV. Comprehensive Examination in Pure and Applied Mathematics

Requirements for the Master of Arts Degree in Mathematics (Statistics Concentration)

- I. Statistics Requirement12 semester hours
 Courses selected from: 1701-540 to 549

- II. Mathematics Electives14 semester hours
- IV. Courses selected from: 1701-520 to 569 or
1701-580 to 589 or
1701-420 to 465

with at least 12 semester hours at the 500 level. Students must elect 1701-425, 426 and 1701-440 or 443, and a computer science course, if not previously taken.

- III. Free Electives6 semester hours
- Comprehensive Examination in Statistics and Mathematics

Requirements for the Master of Arts Degree in Mathematics (Computer Science Concentration)

- I. Required Courses12 semester hours
Courses selected from 1701-560 or 1701-580 to 589
- II. Mathematics Electives14 semester hours
Courses selected from 1701-520 to 569, 1701-580 to 589 or 1701-420 to 465, with at least 12 semester hours at the 500 level. The student must elect 1701-425, 426, 1701-431 or 1701-436, and 1701-440 or 1701-443 if not previously taken.
- III. Free Electives6 semester hours
- IV. Comprehensive Examination in Computer Science and Mathematics

Requirements for the Master of Arts Degree in Mathematics (Mathematics Education Concentration)

- I. Pure and Applied Mathematics14 semester hours
(At least 9 semester hours from courses numbered 520 to 569, 580 to 589).
Courses must be selected from at least 3 of the 5 areas:
Algebra: 1701-431, 531, 532, 535, 536
Analysis: 1701-420, 435, 426, 521, 522, 525, 526
Probability and Statistics: 1701-440, 443, 540 to 549
Geometry: 1701-450, 551, 554, 555
Computers: 1701-560, 580 to 589
Students must elect 425 and 431 if not previously taken.
- II. Mathematics Education9 semester hours
Three courses selected from 1701-570 to 579
- III. Free Electives9 semester hours
- IV. Comprehensive Examination in Mathematics and Mathematics Education.
- Note:** For Teacher Certification additional courses may be required. (See p. 168)

Course Descriptions

1701-510, 511 Workshop in Mathematics Education I, II **3 sh each**
Specific contemporary topics and current issues in the junior and senior high school.
Available experimental and commercial textbooks. Mathematical content. Sources of

aids and equipment. Evaluation. Training of key in-school personnel. Problems of implementation.

1701-520 Set Theory

3 sh

Historical development, paradoxes, ordered sets, Schroder-Bernstein theorem, axiom of choice, transfinite induction, cardinal and ordinal numbers.

Prerequisite: 1701-222 or equivalent.

1701-521, 522 Real Variables I, II

3 sh each

Real number system; Lebesgue measure and integration; differentiation; Fourier series; LP, Metric, Normed vector, Banach and Hilbert spaces.

Prerequisite: 1701-425 or equivalent

1701-525, 526 Complex Variables I, II

3 sh each

Integration and differentiation in the complex domain, Cauchy's theorem, Cauchy integral formula, Laurent expansion, residues, elements of conformal mapping. Series and product representations.

Prerequisite: 1701-425 or equivalent.

1701-531, 532 Abstract Algebra I, II

3 sh each

Basic algebraic structures including groups, rings, fields, modules and lattices.

Prerequisite: 1701-431 or equivalent.

1701-535, 536 Linear Algebra I, II

3 sh each

Vector spaces and linear transformations, including inner product, matrix representations, binary and quadratic forms, eigenvalues and eigenvectors, canonical forms and functions of matrices.

Prerequisite: 1701-335 or equivalent.

1701-537 Mathematical Logic

3 sh

Topics include propositional and predicate calculus, model theory, Godel's completeness theorems and decidability.

Prerequisite: 1701-436 or equivalent.

1701-540 Probability

3 sh

Sample spaces and events, combinatorial analysis, conditional probability and stochastic independence, random variables and probability distributions, expected value and variance, probability generating functions, continuous random variables.

Prerequisite: 1701-340 or equivalent.

1701-541 Applied Statistics

3 sh

Review of estimation and hypothesis testing for one sample and two sample problems; introduction to non-parametric statistics, sampling techniques, and linear regression; fundamental principles of design, analysis of variance and analysis of covariance.

Prerequisite: 1701-440 or 443.

1701-542 Introduction to Stochastic Processes

3 sh

Generating functions, convolutions, recurrent events, random walk models, gambler's ruins problems, Markov chains and processes, time dependent stochastic processes, queuing theory and epidemic models.

Prerequisite: 1701-540.

1701-543 Statistical Theory

3 sh

Review of the normal, gamma and chi-square distributions; sampling theory and the 't' and 'F' distributions; point estimation of one parameter, minimum variance unbiased

estimation, method of moments estimators, maximum likelihood estimation and interval estimation, testing hypotheses, Neyman-Pearson Lemma, Likelihood Ratio Tests, Power, Bivariate Normal Distribution.

Prerequisite: 1701-440 or 443.

1701-545 Multivariate Analysis

3 sh

Statistical procedures for the multivariate normal distribution. Parameter estimation and derived distributions, Hotelling's T statistic, multivariate linear hypothesis, principal component analysis.

Prerequisite: 1701-541 and 548, Recommended: 1701-535

1701-546 Non-Parametric Statistics

3 sh

Selected distribution-free tests and estimation techniques including sign, Kolmogorov-Smirnov, Wilcoxon signed rank, Mann-Whitney, Chi-square, rank correlation, Kendall's tau, Kruskal-Wallis, Friedman, McNemar, and others.

Prerequisite: 1701-541.

1701-547 Design and Analysis of Experiments

3 sh

Fundamental principles of design; completely randomized experiments; randomized block; Latin Squares; Graeco-Latin squares; split-plot design; factorial experiments; confounding; fractional replication; experimental and sampling errors.

Prerequisite: 1701-541 and 548.

1701-548 Applied Regression Analysis

3 sh

Matrices, linear regression; correlation; analysis of residuals; multiple regression; polynomial regression; partial correlation; stepwise regression; regression and model building; regression applied to analysis of variance problems; introduction to nonlinear regression.

Prerequisite: 1701-440 and 443.

1701-549 Sampling Techniques

3 sh

Sampling and survey methodology; basic sampling theory; simple, stratified, random, cluster, systematic and area sampling. Sampling errors and estimation procedures.

Prerequisite: 1701-443 or 440 or equivalent.

1701-551 Topology

3 sh

Basic point-set topology, topological spaces, homeomorphisms, compactness, connectedness, separation properties, uniformities, metricability, introductory algebraic topology, homology groups and homotopy groups.

Prerequisite: 1701-425 or equivalent.

1701-554 Projective Geometry

3 sh

Projective planes and spaces are studied by synthetic and analytic approaches. Topics covered include the theorems of Desargues and Pappus, harmonic sequences, projectivities, coordinatization, finite planes, and conics.

Prerequisite: 1701-450 or equivalent.

1701-555 Differential Geometry

3 sh

Application of vectors to the study of classical three-dimensional geometry. Topics include: plane and space curves, first and second fundamental forms, lines of curvature, asymptotic lines, geodesics.

Prerequisite: 1701-222 or equivalent.

1701-560 Numerical Analysis 3 sh

Topics selected from: polynomial approximation, interpolation, numerical solution of equations, linear algebraic equations, matrix inversion and eigenvalue analysis, numerical solution of differential equations.

Prerequisite: 1701-335, 1701-425, 1701-404 or equivalent.

1701-564 Ordinary Differential Equations 3 sh

Existence and uniqueness of solutions, periodic solutions, linear and non-linear systems, singularities, stability theory.

Prerequisites: 1701-335, 1701-420, 1701-425 or equivalent.

1701-566 Partial Differential equations 3 sh

First order equations, separation of variables, Fourier's series, hyperbolic, parabolic and elliptic equations, transform methods.

prerequisites: 1701-335, 1701-420, 1701-425 or equivalent.

1701-568, 569 Applied Mathematics I, II 3 sh

Topics selected from: discrete mathematics with applications to the social and behavioral sciences, initial and boundary value problems with applications to the physical sciences, Green's functions, integral equations, calculus of variations.

Prerequisites: 1701-335, 1701-420, 1701-425 or equivalent.

1701-570 Administration and Supervision of Mathematics 3 sh

Problems of organization, administration and supervision in the mathematics program of the school. Functions, duties and qualifications of the supervisor investigated. Current problems and research findings.

1701-571 Curriculum Construction in Mathematics 3 sh

Contemporary proposals for the mathematics of grades K through 12. Consideration is given to the problem of implementation of current recommendations. Examination is made of mathematical concepts underlying various programs.

1701-572 Teaching of General Mathematics 3 sh

Mathematics programs for the non-college bound high school student. Investigation of contemporary literature. Topics considered: basic characteristics and needs of non-academic students, preparation and use of resource materials, classroom teaching techniques and methods of motivation. Emphasis on development of suitable curricula for non-academic students.

1701-573 Mathematics Materials for the Teacher of Mathematics 3 sh

Construction, adaptation and effective use of materials to improve the teaching of high school mathematics. Particular attention given to the overhead projector, aids, and models and to material for the mathematics laboratory and club activities.

1701-574 Problem Analysis in Secondary Mathematics 3 sh

Psychology and techniques of problem-solving. Discovery and heuristic methods. Intuitive and inductive reasoning in the solution of non-routine problems from high school mathematics. Problem formation and solution.

Prerequisite: 1701-222 or equivalent.

1701-575 Selected Topics in Mathematics 3 sh

Selection of topics associated with secondary and early college years of mathematics investigated from an advanced point of view. Topics selected to give the teacher a professionalized subject matter viewpoint of algebra, geometry, number theory, real

and complex analysis, probability and statistics.

Prerequisite: 1701-222 or equivalent.

1701-576 Research Seminar in Mathematics Education

3 sh

Designed for matriculated graduate students in the mathematics education program.

Purpose: to have the students survey and analyze recent research projects.

Prerequisite: Admission to Master's program.

1701-577 Mathematics Education in the Elementary School

3 sh

The contemporary mathematics curriculum of the elementary and middle school.

Content: the role of behavioral objectives and learning theory in curriculum development.

Materials. Teacher training. Related research findings.

1701-580 Advanced Programming

3 sh

Assembler language programming including digital representation of data, subroutine linkage, macro definition and generation, and input/output routines. Additional programming techniques including documentation, structured programming, address modification and indexing, string manipulation, and some of the more sophisticated features of the operating system and job control language.

Prerequisite: 1701-404

1701-581 Systems Programming

3 sh

Assembly languages, macros, subroutines, data structures, vectors and arrays, tables, hash coding, stacks, lists, data base system.

Prerequisite: 1701-580

1701-582 Theory of Automata and Formal Languages

3 sh

Languages and grammars, finite automata and regular grammars, context free grammars, push-down automata, Turing machines, computability, deterministic languages, linear bounded automata and stack automata.

Prerequisite: 1701-404 and either 1701-431 or 1701-436

1701-583 Computer Algorithms

3 sh

Data structures, string processing, searching and sorting, list processing, information theory, advanced programming techniques, and applications.

Prerequisite: 1701-404

1701-584 Operating System Design

3 sh

Design and implementation of operating systems, multiprogramming, multiprocessor, device management, scheduling, segmentation, paging, virtual memory, case studies.

Prerequisites: 1701-581, 582

1701-585 Topics in Computer Science

3 sh

Recent developments in the field. Topics such as Monte Carlo methods, simulation and special areas of application may be selected.

Prerequisite: 1701-581

1701-586 Information Retrieval and System Design

3 sh

Random and sequential files. File organization and processing. Access methods, data bases, system dynamics, concepts and design of information systems. Case studies and applications. Programming language COBOL or PL/1.

Prerequisite: 1701-404

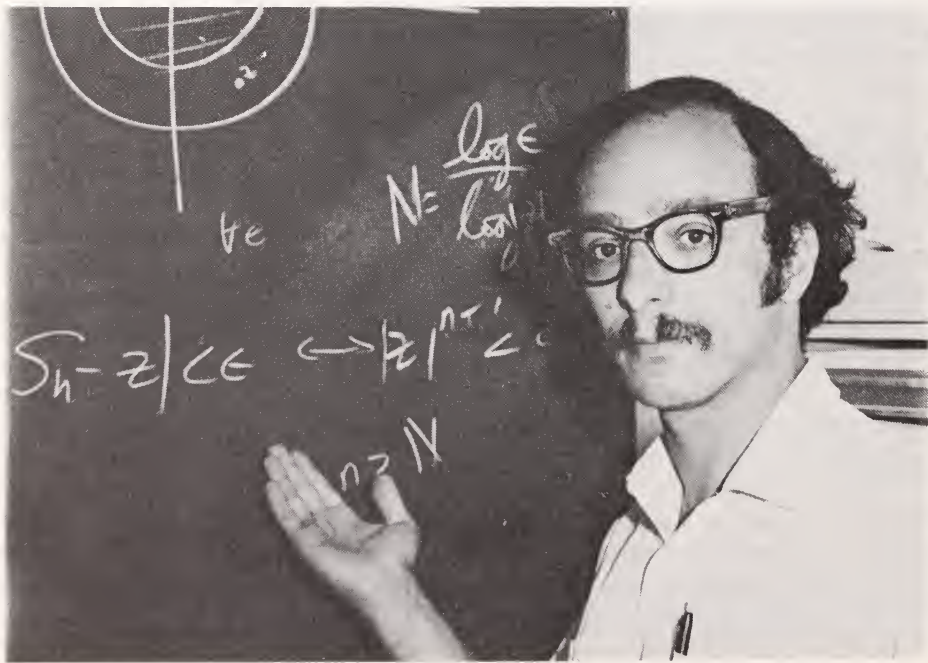
1701-595 Seminar in Mathematics

3 sh

Guided study of selected topics in major field of interest.
Prerequisite: Permission of graduate advisor.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
1701-403 Techniques and Applications of Statistics.....	3
1701-404 Techniques and Applications of Computer Science.....	3
1701-420 Differential Equations.....	3
1701-423 Introduction to Complex Variables.....	3
1701-425 Advanced Calculus I.....	3
1701-426 Advanced Calculus II	3
1701-428 Introduction to Topology	3
1701-431 Foundations of Modern Algebra	3
1701-433 Theory of Numbers.....	3
1701-436 Elements of Logic.....	3
1701-440 Statistical Methods for Research.....	3
1701-443 Statistics: Theory and Applications	3
1701-450 Foundations of Geometry.....	3
1701-460 Introduction to Applied Mathematics.....	3
1701-463 Introduction to Numerical Analysis.....	3
1701-465 Linear Programming and Game Theory.....	3
1701-475 History of Mathematics.....	3



MUSIC

Graduate Advisor: Dr. Jack Sacher

Department Chairman: Dr. Maureen Carr

Graduate study in music offers three concentrations leading to the degree of Masters of Arts: performance, theory/composition and music education. Performance stresses applied music skills; theory/composition stresses creativity and the structure of music; music education stresses philosophical and practical approaches to the work of the music specialist in the American public school.

Although the study of music theory and of applied music is required of all graduate students regardless of the concentration, each concentration provides for individualized course election in accordance with the background, needs and interests of the student.

Registration in applied music and theory is dependent on the placement examination administered by the department; students may not register for work in these areas until the examination has been taken (see below under Admission Requirements).

Admission Requirements

In addition to the general College graduate admission requirements stated in this bulletin (see Admission to Graduate Study), all students must present an undergraduate major in music with at least 40 semester hours of work in theory, music history and private study in a performance medium. Courses in music education may be included as part of this background.

Matriculation as a graduate music major requires taking the music department's Audition and Placement Examination, offered annually in October, February and June. Students must request this examination by writing to the Graduate Advisor two weeks preceding the examination. All applicants must demonstrate familiarity with musical vocabulary and literature and proficiency in the following: performing primary, sight singing, aural and written theory, score analysis, listening analysis, and piano secondary skills (keyboard harmony, sight-reading of chorale literature and the like). Audition literature in the primary medium must represent significant solo material from a variety of eras, one of which must be contemporary. Applicants majoring in orchestral instruments must also present significant solo passages or ensemble passages from orchestral literature.

Applicants to the theory/composition concentration must submit a portfolio of compositions for consideration by the theory faculty.

Applicants to the performance concentration must present an undergraduate major in the primary medium (including at least six semesters of study plus a graduation recital) or professional experience satisfactory to the music department.

Applied Music

Special regulations and procedures for the study of Applied Music are available from the Graduate Advisor. Tuition for the study of Applied Music is based on a special fee structure, information regarding which is available from the Registrar or the Department of Music.

Applied Music may be taken for academic credit only after the student has completed the Department Audition and Placement Examination. Every course number in the area of Applied Music requires the written permission of the Graduate Advisor, the instructor and the Department Chairman. These signatures must be obtained by July 1 (for those desiring study in the fall) or by December 1 (for those studying in the spring). Lessons are normally not given in the summer. A signature of approval is good for only one semester.

No more than 2 semester hours of credit may be awarded for work in a secondary medium.

Courses for 4 and 6 semester hours are open only to majors in the performance (Applied Music) concentration. The grade for the last semester of the sequence will not be given until all recital requirements are completed.

Examinations

All candidates for the degree of Master of Arts in music must pass the department's Comprehensive Examination, given each year in March. Applications for this examination must be made in writing to the Graduate Advisor by February 1 of the year in which the examination is to be taken.

Music Education majors will be examined in pedagogy, music theory, music history and any secondary performing media taken as part of the graduate program. Theory/Composition majors will take examinations in music theory, music history and any secondary performing media taken as part of the graduate program. Performance majors will be examined in music theory, music history and any secondary performing media taken as part of the graduate program.

Requirements for the Master of Arts Degree in Music

Note — The 32 semester hours noted for each concentration is a minimum. Undergraduate transcripts and audition results may require additional undergraduate work before graduate courses are begun or graduate work in excess of the normal 32 semester hours.

(Concentration in Performance)

- I. Required courses.....18 semester hours
 - A. Either of the following sequences: 1004-504/505* or 1004-506/507/508*
(*Grades to be withheld pending completion of recital requirements)12
 - B. Theory sequence 1016-511/512.....6
- II. Electives in Music History or Music Literature8 semester hours
- III. Humanities electives (art, language, literature,
history, philosophy)6 semester hours
- IV. Two recitals.....0 semester hours
 - A. Each to include at least 60 minutes of music,
exclusive of intermissions or pauses.
 - B. One must be public; the other may be public or
before a faculty jury. Procedures are available
from the Graduate Advisor for music.
- V. Comprehensive examination in music theory, music history
and secondary performing media.....0 semester hours

Note: Performance majors wishing to emphasize accompanying may arrange this with the Graduate Advisor.

(Concentration in Theory/Composition)

I.	Required Courses	23 semester hours
A.	Applied Music, selected with approvals of instructor, Graduate Advisor and Department Chairman from 1004-500/501/502/503	4
B.	Theory sequence 1016-511/512.....	6
C.	Private study in composition 1016-518/519	6
D.	Seminar or independent study in music history and research	3
E.	Theory and composition	4
	Humanities electives (art, language, literature, history, philosophy)	3 semester hours
II.	Humanities electives (art, language, literature, history, philosophy)	3 semester hours
III.	Music electives.....	8 semester hours
IV.	Composition and public performance of one of the larger forms of orchestra, vocal ensemble or chamber ensemble	0 semester hours
V.	Comprehensive examination in music theory, music history and secondary performing media.....	0 semester hours

(Concentration in Music Education)

I.	Required Courses	16 semester hours
A.	Applied Music, selected with approval of instructor, Graduate Advisor and Department Chairman from 1004-500/501/502/503	4
B.	Education or Psychology	3
C.	Theory sequence 1016-511/512.....	6
D.	Seminar in Music Education 0832-603.....	3
II.	Music Education.....	6 semester hours
III.	Humanities electives (art, theater, literature, history, philosophy)	6 semester hours
IV.	Music electives.....	4 semester hours
V.	Comprehensive examination in music theory, music history, music pedagogy and secondary performing media	0 semester hours

Students may study applied music only when fully accepted into the graduate degree program in music. Lessons to be taken in a fall semester must be arranged with the graduate advisor for music no later than the previous July 1; in a spring semester, no later than the previous December 1. Applied music may be studied in summer session only with permission of the graduate advisor for music, and in no case for more than 2 semester hours.

Applied music may be studied only with a member of the faculty or with teachers approved by the department. Students of applied music are expected to take jury examinations each semester in which a full recital is not given in courses of 4 or 6 semester hours.

It is highly advisable for non-majors or pre-matriculated students to seek the advice of the graduate advisor for music for any of the following courses.

Course Descriptions

- 0832-520 General Music in the Secondary School** **3 sh**
Examination and practicum of methods, materials and philosophies of non-performance courses in the junior and senior high school.
- 0832-522 Classroom Methods: Piano** **2 sh**
Elementary and secondary classroom methods in the medium of the piano, dealing with principles, materials and methods in teaching groups of students. Designed for teachers wishing to exchange or learn new approaches to classroom techniques.
- 0832-523 Classroom Methods: Brass Instruments** **2 sh**
Materials of 0832-522 as applied to the brass choir.
- 0832-524 Classroom Methods: Woodwind Instruments** **2 sh**
Materials of 0832-522 as applied to the woodwind choir.
- 0832-525 Classroom Methods: Stringed Instruments** **2 sh**
Materials of 0832-522 as applied to the string family.
- 0832-526 Classroom Methods: Percussion Instruments** **2 sh**
Materials of 0832-522 as applied to percussion instruments.
- 0832-527 Classroom Methods: Voice** **2 sh**
Materials of 0832-522 as applied to singing.
- 0832-578 The Kodaly System in Music Education** **2 sh**
Procedures for using Kodaly materials and techniques in teaching music reading and comprehension.
- 0832-579 Problems and Materials of Instrumental Music** **2 sh**
Evaluation of teaching experiences; problems of organizing instrumental music in school; literature for orchestra, band and small ensemble at various levels.
- 0832-580 Problems and Materials of Choral Music** **2 sh**
Survey of choral repertoire for accompanied and unaccompanied groups, for changing, unchanged and mixed voices. Evaluating materials; building programs. Class constitutes a laboratory chorus.
- 0832-581 Orff Workshop I — Concepts and Skills** **3 sh**
Study of basic philosophy of the Orff Schulwerk through movement, melodic and rhythmic training, improvisation and the use of relevant instruments and materials.
Prerequisite: Teacher certification in any field or preparation satisfactory to instructor.
- 0832-582 Orff Workshop II — Pedagogy and Practices** **3 sh**
Refinement of skills in the use of Orff concepts, materials and techniques; practicum in the Orff pedagogy as applicable to American children.
Prerequisite: 0832-581 or equivalent approved by the instructor.
- 0832-583 Orff Workshop III — Advanced Principles and Techniques** **3 sh**
Comprehensive study of the scope of Orff pedagogy and mastery of techniques necessary for the development of music curricula and materials based on employing the Orff approach.
Prerequisite: 0832-582 or equivalent approved by the instructor.

0832-603 Seminar in Music Education**3 sh**

Philosophies of music education and their application to the classroom. Investigation and application of techniques of research as they apply to music education.

1004-500 Applied Music I: Primary Instrument**2 sh**

Study of performance in the student's major area of expression in a manner suited to those specializing in the area of music education or theory-composition. Fifteen private lessons per semester.

Admission by permission only. Music fee. See schedule booklet.

1004-501 Applied Music II: Primary Instrument

Continuation of 1004-500.

Admission by permission only. Music fee.

1004-502 Applied Music: Secondary Instrument I**1 sh**

An elementary course for the beginner or the student with limited background. Fifteen half-hour lessons per semester, private instruction.

Admission by permission only. Music fee.

1004-504 Applied Music III: Primary Instrument**6 sh**

Intensive study in a major performing area for students majoring in applied music. Two recitals of professional caliber are prepared as representative of two semesters of work, or one recital per semester. At least one must be publicly performed, the other may be before a faculty jury. Admission by audition only and open only to majors in applied music. Fifteen one-hour lessons per semester. Music fee.

1004-505 Applied Music IV: Primary Instrument**6 sh**

Continuation of 1004-504. Music fee.

1004-506 Applied Music V: Primary Instrument**4 sh**

Intensive study in a major area of performance similar to 1004-504, 505. Open only to students majoring in applied music. Fifteen one-hour lessons per semester.

Admission by audition only. Music fee: See schedule booklet.

1004-507 Applied Music VI: Primary Instrument**4 sh**

Continuation of 1004-506. Music fee.

1004-508 Applied Music VII: Primary Instrument**4 sh**

Continuation of 1004-507. Music fee.

1004-528 Survey of Wind Instrument Music**2 sh**

For brass and woodwind players, solo, ensemble and full band; materials for elementary and secondary school instrumentalists. Attention to music written for wind instruments and newly-published compositions. Class constitutes a laboratory band and ensemble groups.

1004-529 Choral Conducting**2 sh**

Problems and techniques of choral rehearsal and performance: tone production, intonation, balance and diction. Accompanied and unaccompanied choral repertoire.

Prerequisites: Undergraduate course in choral conducting or experience satisfactory to the instructor or the graduate advisor for music.

1004-530 Advanced Conducting**3 sh**

Baton techniques, clef reading, playing from score at the piano, transposition, score analysis, rehearsal techniques and problems of interpretation and accompaniment by

orchestra and band, as well as choral conducting techniques.

Prerequisite: Preparation satisfactory to the instructor or the graduate advisor.

1004-531 Ensemble: Chorus I **2 sh**

Rehearsal and performance in conventional choral media. Admission by audition only.

1004-532 Ensemble: Chorus II **2 sh**

A second semester of 1004-531.

1004-533 Ensemble: Opera Workshop I **2 sh**

Rehearsal and performance of operatic repertoire in English or English translation. Admission by audition only. Auditions held in the semester prior to the one in which the workshop is offered. Open to pianists and singers.

1004-534 Ensemble: Opera Workshop II **2 sh**

A second semester of 1004-533.

1004-535 Ensemble: Band I **2 sh**

Rehearsal and performance of band and wind ensemble literature. Admission by audition only.

1004-536 Ensemble: Band II **2 sh**

A second semester of 1004-533.

1003-537 Ensemble: Orchestra I **2 sh**

Rehearsal and performance of orchestral repertoire. Admission by audition only.

1004-538 Ensemble: Orchestra II **2 sh**

A second semester of 1004-537.

1004-539 Master Class in Musical Performance: German Vocal Literature **2 sh**

Coaching small groups in refinements of performance, including stylistic interpretation, programming, interpretative analysis, diction, etc. Open through audition to both singers and pianists.

1004-540 Master Class in Musical Performance: Italian Vocal Literature **2 sh**

Similar to 1004-539, but focusing on Italian repertoire. Open through audition to singers and pianists.

1004-541 Master Class in Musical Performance: French Vocal Literature **2 sh**

Similar to 1004-539, but focusing on French repertoire. Open through audition to singers and pianists.

1004-542 Master Class in Musical Performance: English Vocal Literature **2 sh**

Similar to 1004-530, but focusing on English repertoire. Open through audition to singers and pianists.

1004-543 Master Class in Musical Performance: Woodwind Literature **2 sh**

Coaching small groups in solo and small ensemble literature for woodwind instruments. Stress on stylistic interpretation, tone, balance and other refinements of performance. Open through audition. Pianists may register as accompanists, but must audition.

1004-544 Master Class in Musical Performance: Brass Literature **2 sh**

Similar to 1004-543, but focusing on brass repertoire. Open to pianists and brass players through audition.

- 1004-545 Master Class in Musical Performance: String Literature** 2 sh
Similar to 1004-543, but focusing on string repertoire. Open to pianists and string players through audition.
- 1004-546 Master Class in Musical Performance: Organ Literature** 2 sh
Similar to 1004-542, but focusing on organ repertoire. Open to organists only, through audition.
- 1004-547 Master Class in Musical Performance: Piano Literature** 2 sh
Similar to 1004-543, but focusing on piano repertoire. Open to pianists only, through audition.
- 1004-548 Master Class in Musical Performance: Percussion Literature** 2 sh
Similar to 1004-543, but focusing on percussion repertoire. Open to percussionists through audition.
- 1006-549 Modern Music** 2 sh
Study of musical styles of the 20th century. Historical sources, major composers and recent trends.
- 1006-550 Chamber Music** 3 sh
Survey of vocal and instrumental music composed for one to ten performers, one per part, from the Renaissance through the modern era. Analysis of both compositional style and nature of chamber genres.
- 1006-551 The Literature of the Orchestra** 3 sh
Historical survey of such genres as the suite, overture, concerto, symphony and tone poem from the development of orchestral style of playing in the 17th century to the present.
- 1006-552 An Ethnological Approach to Music** 3 sh
Non-Western music; ethnic roots and influences, theory, media and performance practices. Folk and professional idioms of the Far East, Near East, Africa, Europe and the Americas. Study for non-majors will emphasize musical experience and social-cultural background, while music majors will also pursue a more technical approach.
- 1006-553 Jazz** 3 sh
Jazz as an art form, its impact on music and other contemporary arts; the sociological impact in American and world culture. Examination of specific performance techniques.
Prerequisite: At least one undergraduate or graduate semester of music or permission of the instructor or graduate advisor for music.
- 1006-554 Development of the Opera I** 3 sh
Operas of the Baroque and Classical eras from Monteverdi through Beethoven; evolution of style, changing aesthetics, characterization and plot development and the cultural environment within which these developments have taken place.
- 1006-555 Development of the Opera II** 3 sh
Continuation of 1006-554, examining operatic styles and representative works of the Romantic and Modern eras.
Prerequisite: 1006-554 or permission of the instructor or graduate advisor for music.
- 1006-604 Seminar in Historical Research** 3 sh
Study of music bibliography, research method and critical analysis. Open to fully matriculated students majoring in music.

1006-605 Seminar in Historical and Theoretical Studies**3 sh**

Research and discussion of selected topics in the literature of music focusing on stylistic and analytical problems.

Prerequisite: Graduate music major status or permission of the instructor.

1016-501 Music Typography**2 sh**

Preparation of music for publication through the use of the music typewriter; preparation of scores, instrumental parts and vocal scores.

1016-511 Theoretical and Aural Skills in Music I**3 sh**

Principles and practice of music construction, aural skills in manipulating pitch and rhythm, and related structural analysis. The total spectrum of music as a base, with specific techniques of pitch and rhythm approached from harmonic and contrapuntal standpoints. Primitive and simple folk idioms, model counterpoint in two and three parts, diatonic tonal harmony in vocal and instrument styles, tonal counterpoint in two parts and free composition. Open to music majors only.

1016-512 Theoretical and Aural Skills in Music II**3 sh**

Continuation of 1016-511. Complex non-Western systems, modal and tonal imitative counterpoint in three and four parts, chromatic tonal harmony and expanded resources and techniques of the twentieth century.

Prerequisite: 1016-511 or equivalent, the latter determined by the instructor or the graduate advisor for music.

1016-513 Composition**3 sh**

Writing of variations, small forms, songs and compositions for small ensembles. Analysis and workshop performance include.

Prerequisite: 1016-511 or equivalent.

1016-515 Advanced Counterpoint**3 sh**

Analysis and composition of polyphonic forms, techniques in inventions, canons and motets based on the several compositional styles of Western music.

Prerequisite: 1016-512 or equivalent.

1016-516 Advanced Instrumentation**2 sh**

Workshop course: tutti instrumentation in orchestra and band; scoring for small ensembles; instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Performance of student instrumentations when possible.

Prerequisite: 1016-511 or equivalent.

1016-517 Theory of Sound**2 sh**

Phenomena of sound as related to hearing music theory, musical instruments, reproduction of music (phonograph, etc.) and conditions under which music is heard.

1016-518 Private Study in Composition I**3 sh**

Advanced work in musical composition in forms and genres determined jointly by teacher and student. Fifteen private lessons per semester.

Admission by permission only. Music fee:

1016-519 Private Study in Composition II**3 sh**

Continuation of 1016-518.

Admission by permission only. Music fee.

Independent Study in Music**3 sh**

1. 1004-599 Independent Study in Performance
- 1006-599 Independent Study in Music History and Literature
- 1016-599 Independent Study in Theory/Composition
- 1017-599 Independent Study in Music Therapy
- 1018-599 Independent Study in Sacred Music

Regularly listed courses pursued in greater depth, by arrangement with the graduate advisor for music prior to registration. May be elected more than once during the program, but only one course per semester. Written permission required.

2. 0832-600 Independent Study in Music Education **4 sh each**
- 1004-600 Independent Study in Performance
- 1006-600 Independent Study in Music History and Literature
- 1016-600 Independent Study in Theory/Composition
- 1017-600 Independent Study in Music Therapy
- 1018-600 Independent Study in Sacred Music

Individual pursuit of a research topic culminating in a written document of length and scholarly integrity. Arranged with the graduate advisor for music and a course advisor appointed by him, prior to the independent study semester. May cover two semesters; student registers for the one in which the work will be completed. Written permission required. Special fee: See schedule booklet.



PHYSICAL EDUCATION

Graduate Advisor: Dr. Richard W. Tews

Department Chairman: Dr. Hazel M. Wacker

The graduate program in physical education is designed to assist the student in gaining depth and understanding in his specialization. It provides a variety of opportunities for the student to assess the function of physical education in modern society through: the examination and evaluation of recent developments in education and the field of specialization; experimentation with new methods and techniques; the survey of current as well as historical documents.

Admission Requirements

A bachelor's degree with a major or minor in physical education from an accredited college or university constitutes the minimum requirement for admission. A candidate for the Master of Arts degree should consult the graduate advisor before matriculation. The student may be requested to undertake additional work where deficiencies are apparent. These requirements will be in addition to the minimum 33 semester hours.

Requirements for the Master of Arts Degree in Physical Education

I.	Required Courses	12 or 13 semester hours
	0835-553 Neurological Approach to Motor Learning and Performance	3
	0835-579 Advanced Measurement and Evaluation in Physical Education	3
	0835-503 Research Methods in Physical Education.....	3
	0835-603 Research Seminar in Physical Education (3 sh) or Thesis 600 (4 sh).....	3 or 4
	0835-604 Critical Analysis of Research Literature	3
II.	Areas of Specialization	9 semester hours (Select 3 courses in any one area)
	A. Human Performance	
	0835-554 Orientation in Sports Medicine	3
	0835-555 Scientific Analysis of Sports and Physical Education Skills	3
	0835-556 Psychological Basis of Motor Learning and Performance	3
	0835-557 Perceptual Motor Learning in Physical Education	3
	B. Curriculum and Teaching	
	0835-506 Physical Education Programs for Secondary Schools	3
	0835-576 Physical Education Programs for Elementary Schools	3
	0835-516 International Aspects of Physical Education.....	3
	0835-550 Survey of Literature and Trends in Physical Education.....	3

- | | | |
|----|---|---|
| | 0835-575 Philosophical and Sociological Foundation
of Physical Education | 3 |
| C. | Administration & Supervision | |
| | 0835-508 Administration & Supervision of Athletics
and Coaching | 3 |
| | 0835-577 Administration & Supervision of
Physical Education..... | 3 |
| | 0835-521 Coordination & Supervision of Elementary and
Middle School Physical Education | 3 |
| | 0835-552 Seminar in Current Problems in Athletics | 3 |
| D. | Programs for the Disabled | |
| | 0835-530 Individualized Programs in Physical Education
for the Handicapped | 3 |
| | 0835-531 Practicum in Physical Education for the Handicapped..... | 3 |
| | 0835-532 Therapeutic Recreation..... | 3 |
| E. | Recreation | |
| | 0835-551 Philosophy of Recreation in School and Community..... | 3 |
- III. Physical Education Electives6 semester hours
Electives should be selected from any of the courses listed above on the basis of your needs and interests. You may select any of the courses which were not used to meet basic requirements.
- IV. Free Electives6 semester hours
Minimum: 33-34 semester hours
- V. Final Document Options
- 0835-603 Research Seminar is a one semester course in which a mini-research project is completed.
- 0835-604 Critical Analysis of Research Literature is a one semester course. Research studies and documents related to a particular area of interest are read, evaluated and analyzed.
- 0835-600 Thesis involves in-depth research on a particular topic. It will take at least a year to complete the work with a committee of three faculty members serving as advisors.
- A written comprehensive exam related to course material completed by the student is required of those taking 0835-603 or 604.
- Those selecting the Thesis will have an oral exam and thesis "defense" with a faculty committee.

Course Descriptions

- 0835-503 Research Methods in Physical Education** **3 sh**
The theory of experimental, descriptive, historical and philosophical methods of research in physical education: bibliographical sources and references, application of measurement, data collection and analysis and formulation of a research proposal.
Prerequisite: 0835-570 Advanced Measurement and Evaluation in Physical Education.

0835-506 Physical Education Programs for Secondary Schools

3 sl

The factors which must be considered in the development, conduct and revision of physical education programs for secondary schools.

0835-508 Administration and Supervision of Athletics and Coaching

3 sl

Underlying principles and desirable practices from the point of view of the administrator and supervisor, and of the person supervised and subjected to administrative policies. Interviewing, observation, conducting conferences and administrative considerations.

0835-516 International Aspects of Physical Education

3 sl

Study of physical education on a comparative basis, interrelating programs of countries around the world. Insight into international situations and conditions through physical education and sport as a cultural force.

0835-521 Coordination and Supervision of Physical Education in the Elementary and Middle School

3 sl

Current administrative and organizational patterns in school systems. The role of the coordinator and supervisor in relation to the highest level of teaching and maximum learning. A review of curriculum designs and content.

Prerequisite: A course in physical education for elementary school or a curriculum course.

0835-530 Individualized Program in Physical Education

3 sl

Prerequisite: 2001-564 — Psychology and Education of Physically and Mentally Handicapped Child or two years experience in appropriate environment.

0835-531 Practicum in Physical Education for the Handicapped

3 sl

120 hours including conference time. Approval of the instructor is necessary. The student may elect to take his practicum in a nearby institution or school of the mentally retarded, emotionally disturbed, physically handicapped or sensory handicapped.

Prerequisite: 0835-557 Perceptual Motor Learning in Physical Education.

0835-532 Therapeutic Recreation

3 sl

The development, supervision and coordination of therapeutic recreation programs in various types of institutional and community settings.

Prerequisite: 1220-581 or 586.

0835-550 Survey of Literature and Trends in Physical Education

3 sl

Comprehensive survey of books, periodicals and other teaching materials in the field of physical education; outstanding authors and current leaders in physical education and their basic philosophies.

0835-551 Philosophy of Recreation in School and Community

3 sl

Development of recreational philosophies; the modern philosophy in America. Organization of recreation in school and community; the importance of leadership; social and cultural implications; economic, governmental and leisure time influences and study of current practices.

0835-552 Seminar in Current Problems in Athletics (Men and Women)

3 sl

The organization, planning and administration of intramural and interscholastic sports programs for men and women. Program development, scheduling, promotion and conduct of the program and personnel selection. Other persistent problems identified by

the students will be discussed as will trends in such areas as sports medium, coaching and officiating.

0835-553 A Neurological Approach to Motor Learning and Performance 3 sh

The psychology of motor behavior, a neuropsychological approach; integrating neuropsychological and behavioral information as a beginning toward understanding motor behavior.

0835-554 Orientation in Sports Medicine 3 sh

New techniques, materials, modalities and problems related to the prevention and care of athletic injuries; current developments in the field; new conditioning concepts and activities for both the athlete and non-athlete.

Prerequisite: Courses in Kinesiology, Physiology of Exercise and Prevention and Care of Athletic Injuries.

0835-555 Scientific Analysis of Sports and Physical Education Movements 3 sh

Drawing the free body diagram and calculating moments of force for a complete body motion; special related problems of body impact, equipment impact, the basic laws of mechanics and aerodynamic and fluid-dynamic problems.

0835-556 The Psychological Bases of Motor Learning and Performance 3 sh

Psychological principle and research related to physical activity and educational program situations. Continued research and psychological evidence utilized to improve physical education methodology.

0835-557 Perceptual Motor Learning in Physical Education 3 sh

Current theories concerning the inter-relationships of perceptual development and sensory-motor activity; implications for elementary school physical education programs.

Prerequisite: Elementary Physical Education Methods Course.

0835-563 Urban Park and Recreation Management 3 sh

Administration and policies of park and recreation agencies, including organizational structure, boards and commissions, executive leadership, decision making, personnel finance, public relations, office management, legal provisions, operational research, etc. Management procedures for metropolitan and regional parks including specialized facilities, e.g., golf courses, pools, ice rinks, etc.

0835-575 Philosophical and Sociological Foundations of Physical Education 3 sh

The historical development of modern physical education programs; the sociological factors affecting behavior in modern society applied to teaching and coaching situations.

Prerequisite: A course in the history and principles of physical education.

0835-576 Programs in Physical Education for the Elementary School 3 sh

The selection of appropriate physical education activities for elementary programs based on principles of growth and development, and psychological and sociological needs. The relationship of physical education to other areas of instruction in the school curriculum, and to the secondary school program.

Prerequisite: Methods course in physical education for elementary school children.

0835-577 Administration and Supervision in Physical Education 3 sh

Role of the teacher and administrator; interview, visitation, conference and other techniques in reference to student teachers, beginning teachers and experienced teachers. Supervision of both physical education and classroom teachers.

0835-579 Advanced Measurement and Evaluation in Physical Education**3 sh**

New tests and techniques for determining levels of skill, growth and development, and the qualities which contribute to total physical fitness. Advanced techniques for processing data.

Prerequisite: A course in educational statistics.

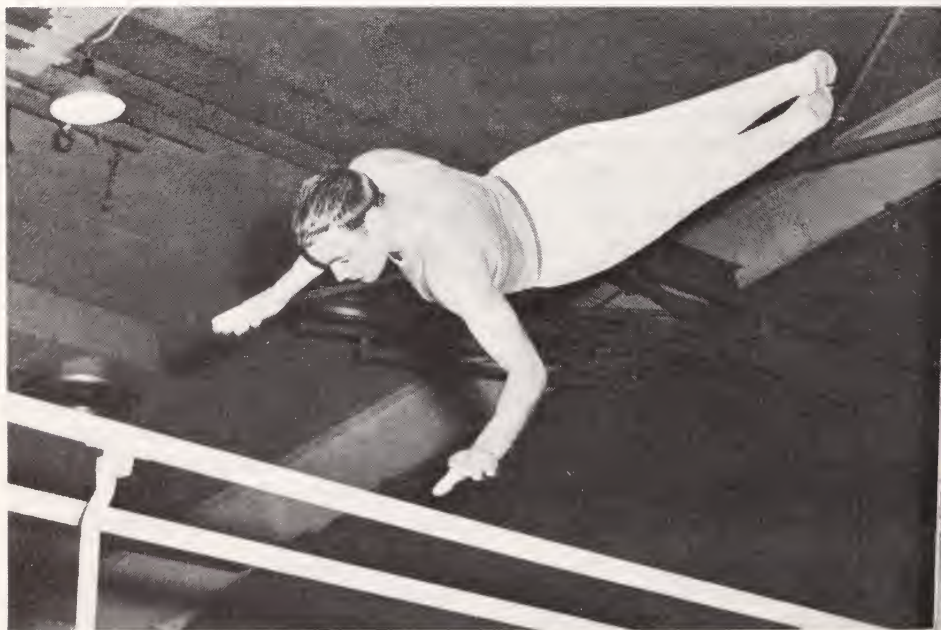
0835-603 Research Seminar in Physical Education**3 sh**

The principles upon which physical education research is based; studies, programs, personnel and techniques employed in research. A research project must be presented to the physical education faculty for approval.

Prerequisite: 0835-503 Research Methods in Physical Education.

0835-604 Critical Analysis of Research Literature**3 sh**

A critical analysis of research literature in the field of Physical Education and a study of the application of research literature and findings in teaching and coaching.



PSYCHOLOGY

Graduate Advisor: Dr. Paul Locher

Department Chairman: Dr. John Seymour

The department of psychology offers three distinct graduate programs and one interrelated program.

1. The Master of Arts in Educational Psychology aims to increase the student's knowledge of the application of psychological theory to educational practice. A specialization in Human Sexuality is being offered as part of the program leading to a Master of Arts in Educational Psychology.

2. The Master of Arts in Psychology is designed primarily as an intermediate degree. This program prepares for advanced studies in many psychological fields such as personality and counseling, school, social, industrial and developmental psychology.

3. The School Psychologist Certification Program is designed to meet the need for school psychologists by offering an integrated sequence of courses and supervised school, clinical and community experiences.

4. The Interrelated Program in Special Education and Special Pupil Services: Teacher of the Emotionally and Socially Disturbed leads to the Master of Arts degree and eligibility to apply for New Jersey Teacher of the Handicapped certification.

Admission Requirements

Candidates for the Master of Arts in Educational Psychology must meet College requirements and be approved by departmental committee.

Candidates for the Master of Arts in Psychology must meet the following departmental requirements:

1. 12 undergraduate credits in psychology.
2. A laboratory course in experimental psychology and a course in statistics.*
3. Miller Analogies Test and the Advanced Psychology Test of the Graduate Record Examination.
4. Approval by the departmental committee.

Candidates for the School Psychologist Certification Program must meet the following departmental requirements:

1. The Miller Analogies Test and the advanced GRE in psychology or education.
2. Two additional letters of reference.
3. Approval by the departmental committee.

Note: Final application date is December 31.

Candidates for the Interrelated Program in Special Education and Special Pupil Services must meet the following departmental requirements:

1. Miller Analogies Test.
2. Interview with and approval by the departmental committee.
3. Preparation in psychology and education courses is desirable. Students lacking minimal preparation will be required to take prerequisite courses. Teaching certification is not required.

Note: Minimum residency of one year and one summer is also required.

*If the student lacks experimental psychology or statistics, he may be admitted as a pre-matriculated graduate student by including such requirements in his program, to be taken without credit.

Requirements for the Master of Arts Degree in Educational Psychology

I. Required Courses	15 semester hours
2001-510 Research Methods in Psychology.....	3
2001-560 Advanced Educational Psychology	3
2001-561 Developmental Psychology.....	3
2001-578 Psychological Tests and Measurements	3
2001-660 Seminar in Educational Psychology.....	3
II. Educational Foundations	6 semester hours
2001-538 Ethnopsychology (also 2202-538).....	3
2001-553 Urban Psychology	3
2208-579 Community Resources and Youth.....	3
2202-534 Anthropology and Education	3
2202-535 Ethnology	3
III. Specialization	6 semester hours
2001-555 Psychological Aspects of Poverty	3
2001-564 Psychology and Education of the Physically and Mentally Handicapped	3
2001-565 Psychology and Education of the Socially and Emotionally Handicapped	3
2001-566 Psychology and Education of the Gifted.....	3
IV. Electives.....	6 semester hours
2001-550 Quantitative and Statistical Methods	3
2001-552 General Social Psychology.....	3
2001-563 Theories of Learning	3
2001-573 Physiological Psychology.....	3
2001-580 Personality	3
2001-581 Motivation.....	3
V. Comprehensive Examination	
VI. Thesis (Elective)	4
	Minimum: 33 semester hours

Requirements for the Master of Arts Degree in Educational Psychology (Specialization in Human Sexuality)

I. Required Courses	12 semester hours
2001-510 Research Methods in Psychology.....	3
2001-560 Advanced Educational Psychology	3
2001-561 Developmental Psychology.....	3
2001-660 Seminar in Educational Psychology.....	3
II. Foundations	6 semester hours
2202-538 Ethnopsychology	3
2001-553 Urban Psychology	3
2208-579 Community Resources and Youth.....	3
2202-535 Ethnology I	3
2001-446 Today's Woman.....	3

III. Specialization	15 semester hours
2001-548 Sex Education in Schools and Agencies.....	3
3001-542 Workshop in Psychology—Sex Education	3
2001-567 Abnormal Psychology	3
2001-580 Personality	3
2001-641 Perspectives in Human Sexuality	3
2001-645 Sexual Function & Dysfunction.....	3
IV. Electives	3 semester hours
2001-552 General Social Psychology.....	3
2001-578 Psychological Tests and Measurements	3
2001-573 Physiological Psychology.....	3
0401-540 Comparative Human Anatomy	4
2208-563 Self and Society	3
2208-573 The Family as an Institution	3
V. Comprehensive Examination	Minimum: 36 semester hours

**Requirements for the Master of Arts Degree in Educational Psychology
(Interrelated Graduate Program in Special Education and Special Pupil Services:
Teacher of the Behaviorally Disturbed)**

Program Coordinator and Graduate Advisor: Dr. Walter R. Duryea

One course of study in the College's interdepartmental programs in special education prepares students to teach socially and emotionally maladjusted children. This concentration leads to New Jersey Certification in Teacher of the Handicapped.

I. Required Courses	9 semester hours
0824-578 Testing and Evaluation.....	3
Two of the following:	
0808-500 Nature of Reading or.....	3
1220-500 Acquisition of Speech and Language	3
and either:	
2001-560 Advanced Educational Psychology or.....	3
2001-563 Theories of Learning	3
Electives approved by advisor may be taken in place of, or in addition to, required courses if equivalencies of the above are approved.	
II. Core Courses	8 semester hours
Required:	
2001-561 Developmental Psychology.....	3
2001-565 Psychology and Education of Socially and Emotionally Handicapped Children	3
2001)-620 Orientation and Observation in Special Education	2
1220)	

Electives approved by advisor may be taken in place of, or in addition to, required courses if equivalencies of the above are approved.

III. Specialized Requirements.....	21 semester hours
2001-540 Teaching and Remediation Techniques	3
2001-541 Adaptive Curriculum and Program Planning.....	3
2001-545 Seminar in Behavioral Disturbances of Children I.....	3
2001-546 Seminar in Behavioral Disturbances of Children II	3
2001-553 Urban Psychology	3
2001-663 Independent Study.....	2
2001-664 Practicum in Teaching Behaviorally Disturbed Children I (Student Teaching)	2
2001-665 Practicum in Teaching Behaviorally Disturbed Children II.....	2

IV. Comprehensive Examination

Note: For candidates not presenting a teaching certificate, 0829-400 Teacher, School and Society is a prerequisite course.

Requirements for the Master of Arts Degree in Psychology

I. Required Courses	13 semester hours
2001-520 Advanced General Psychology I	3
2001-521 Advanced General Psychology II	3
2001-550 Quantitative and Statistical Methods.....	3
2001-600 Thesis.....	4
II. Elective Courses	15 semester hours
2001-551 Experimental Psychology	3
2001-552 General Social Psychology.....	3
2001-553 Urban Psychology	3
2001-554 Psychology in Business and Industry	3
2001-555 Psychological Aspects of Poverty	3
2001-561 Developmental Psychology.....	3
2001-563 Theories of Learning	3
2001-567 Abnormal Psychology	3
2001-568 Psychology of Group Dynamics	3
2001-573 Physiological Psychology.....	3
2001-578 Psychological Tests and Measurements	3
2001-579 Seminar in Psychological Tests and Measurements	3
2001-580 Personality	3
2001-581 Motivation.....	3
2001-582 Behavior Modification	3
2001-583 Sensation and Perception	3
2001-584 Comparative Psychology	3
2001-593 Clinical Interviewing.....	3
2001-663 Independent Study.....	3
III. Free Electives	6 semester hours
IV. Comprehensive Examination: written examination precedes acceptance of a thesis outline and an oral examination at completion of thesis.	
V. Department Colloquium: presentation of proposed theses and current research. Graduate students and faculty invited.	Minimum: 34 semester hours

**Requirements for School Psychologist Certification
(N.J. State Certificate)**

- I. Educational Foundations 12 semester hours
 - 0821-521 Contemporary Educational Thought.....3
 - 2001-538 Ethnopsychology3
 - 2001-553 Urban Psychology3
 - 2001-555 Psychological Aspects of Poverty3
 - 2001-560 Advanced Educational Psychology.....3
 - 2001-660 Seminar in Educational Psychology.....3
 - 2002-535 Ethnology I.....3
 - 2208-565 Sociology of Youth.....3

 - II. Education of the Handicapped6 semester hours
 - 2001-564 Psychology and Education of the Physically
and Mentally Handicapped3
 - 2001-565 Psychology and Education of the Socially
and Emotionally Handicapped3

 - III. Testing and Clinical Techniques25 semester hours
 - 2001-510 Research Methods in Psychology.....3
 - *2001-550 Quantitative and Statistical Methods.....3
 - *2001-574 Individual Intelligence Testing.....3
 - *2001-575 Projective Techniques I3
 - *2001-576 Projective Techniques II.....3
 - *2001-578 Psychological Tests and Measurements.....3
 - 2001-590 Diagnostic Case Studies3
 - *2001-593 Clinical Interviewing.....3
 - 2001-661 Practicum in School Psychology.....3
 - *2001-662 School Psychologist Externship.....3

 - IV. Personality and Behavioral Development..... 12 semester hours
 - 2001-561 Developmental Psychology.....3
 - 2001-563 Theories of Learning3
 - 2001-567 Abnormal Psychology3
 - 2001-573 Physiological Psychology.....3
 - 2001-580 Personality3
 - 2001-582 Behavior Modification3

 - V. Electives: Select courses to balance the program, with permission of
graduate advisor. Minimum: 60 semester hours
- Interrelated Program in Special Education and Special Pupil Services: Teacher of
the Socially and Emotionally Handicapped. See page 155.

Course Descriptions

2001-503 Language and Communication

3 sh

Influence of psychology, linguistics and biology on the learning and use of language. Psycholinguistics, language and thought, language disorders, development of communication, dialect differences.

2001-510 Research Methods in Psychology

3 sh

Non-laboratory introduction to correlational and experimental methods of research in psychology applied to practical issues. Required of students matriculated in the Educational Psychology program.

Prerequisite: A graduate course in psychology.

Note: Students who have recently completed a course in statistics should substitute 2001-550.

2001-520 Advanced General Psychology I

3 sh

Learning and Motivation (first half term), personality and abnormal psychology (second half term). Open to matriculated candidates in General Psychology program only. Must be taken during the first year of the program.

2001-521 Advanced General Psychology II

3 sh

Sensation and perception (first half term), social psychology (second half term). Open to matriculated candidates in General Psychology program only.

2001-538 Ethnopsychology

3 sh

See Anthropology 2202-538.

2001-540 Teaching and Remediation Techniques

Teaching and remediation of basic skills with behaviorally disturbed students; methods and materials in reading, mathematics, and language arts.

Prerequisite: Permission of instructor.

2001-541 Adaptive Curriculum and Program Planning

Modifying the school curriculum, program planning, and behavioral management options for the behaviorally disturbed students.

Prerequisite: Permission of instructor.

2001-542 Workshop in Psychology—Human Sexuality

3 sh

Psychologists, health educators, religious leaders, sociologists, biologists, physicians and media specialists lecture and participate in group discussions: sex education in the home, marriage and family relations, genetics, birth control, sex and religion, developmental psychology and sex role, sex and the self-concept.

2001-545 Seminar in Behavioral Disturbances of Children I

3 sh

Research findings in the area of childhood personality disorders and of the techniques and philosophy of their education. Psychodynamics and educational diagnosis and planning for effective placement and program. Open only to matriculated students.

Prerequisite: Permission of the instructor.

2001-546 Seminar in Behavioral Disturbances of Children II

3 sh

Day to day problems of adjustment in the educational setting and the relationships to major theoretical approaches, e.g., behavioral, psychoanalytic and existential. Working with family and parents explored. Integrated with special practicum experiences.

Prerequisite: 2001-545 and 665, or its equivalent and permission of the instructor.

- 2001-548 Sex Education in Communities and Agencies** 3 sh
Techniques for working with communities and agencies in setting up courses and offering materials for community programs in sex education.
- 2001-549 Psychology of the Adult Learner** 3 sh
Methods and materials of learning which can be adapted to adult education. Identifying educational needs, understanding problems of the adult learner, overcoming learning difficulties, motivation and other factors affecting learning and counselling procedures. Course individually programmed commensurate with the student's background and professional goals.
- 2001-550 Quantitative and Statistical Methods** 3 sh
Principles and techniques of data analysis and experimental design in psychology, estimation of parameters, and hypothesis testing. Open only to matriculated students. Prerequisite: Permission of instructor and a qualifying examination in basic statistics.
- 2001-551 Advanced Experimental Psychology** 3 sh
Laboratory course on contemporary research issues in psychology. An original research project will be required. Recommended for students intending to enter doctoral programs. Prerequisites: Undergraduate Experimental Psychology and 2001-550.
- 2001-552 General Social Psychology** 3 sh
Theory, methodology and research findings. Biological basis of social behavior, socialization, attitudes development and change, value systems, group processes and conflict. Prerequisite: One course in psychology.
- 2001-553 Urban Psychology** 3 sh
Theoretical and empirical literature on cities and those who live in and near them. Interaction of individual psychological factors, social psychological factors and urban structures. Problems and issues related to crowding and density, poverty, housing, urban planning, neighborhoods, race relations. Prerequisite: One course in psychology.
- 2001-555 Psychological Aspects of Poverty** 3 sh
Relationships between individual and group psychological factors and poverty as a major domestic issue. Critical approaches to psychological theories of poverty. Prerequisite: 2001-553.
- 2001-556 Environmental Psychology** 3 sh
Interaction of the physical environment with human behavior. Population density and crowding; environmental perception, historic environmental attitudes; architecture and behavior; unusual environments; man and the natural world.
- 2001-560 Advanced Educational Psychology** 3 sh
Focus on the learner and the learning process in school situations. Motivation, acquisition of skills, ideas and attitudes, technological and other innovations in teaching and learning and evaluation of teacher-learning. Prerequisite: One course in psychology.
- 2001-561 Developmental Psychology** 3 sh
Theoretical issues and research findings on mental processes from pre-natal life through adolescence. Open only to matriculated students. Prerequisite: One course in psychology.

- 2001-562 Dynamics of Human Behavior** **3 sh**
 Relationship of social forces to mental health. Environmental factors which contribute towards behavioral and learning pathologies.
- 2001-563 Theories of Learning** **3 sh**
 Review of current learning theory and research and the implications for education. Open only to matriculated psychology majors. A section may be opened for other matriculated students.
 Prerequisite: Two courses in psychology or permission of graduate advisor.
- 2001-564 Psychology and Education of Physically and Mentally Handicapped Children** **3 sh**
 Current practices and problems in the education of children with physical and mental handicaps. Designed for teachers, counselors, supervisors and administrators who work with such children or who wish to prepare for school and community leadership in developing facilities.
 Prerequisite: 2001-561.
- 2001-565 Psychology and Education of Socially and Emotionally Handicapped Children** **3 sh**
 Practice and problems in education of socially and emotionally handicapped children.
 Prerequisite: 2001-561.
- 2001-566 Psychology and Education of the Gifted** **3 sh**
 Picture of bright and gifted young people in contemporary American life. Various practices involved in education, as well as the psychological characteristics of this group and socio-emotional development.
 Prerequisite: 2001-561 or permission of the instructor.
- 2001-567 Abnormal Psychology** **3 sh**
 Models and selected research in psychopathology: psychopathology, physical illness, psychosomatic and somatopsychic disorders, neurosis, psychosis, environmental factors in relation to organic factors.
 Prerequisite: 2001-580.
- 2001-568 Psychology of Group Dynamics** **3 sh**
 Theories of group dynamics and illustrative application to industrial, marital, political, interracial and professional life; personal participation by the student in a group interactive process. Open only to matriculated psychology majors.
- 2001-573 Physiological Psychology** **3 sh**
 Investigation of physiological correlates of behavior with emphasis on a sensory apparatus as well as the major neuro-endocrine integrating relationships in the more complex behaviors. Open only to matriculated psychology majors. A section may be opened for other matriculated students.
 Prerequisite: One course in Experimental Psychology, one in Biology and permission of instructor.
- 2001-574 Individual Intelligence Testing** **3 sh**
 Administration, scoring and interpretation of individual intelligence tests. Student is required to use the Stanford-Binet Scale, the Wechsler Intelligence Scale for Children, and the Wechsler Adult Intelligence Scale.
 Prerequisite: Approved certification candidacy in the School Psychology program.

2001-575 Projective Techniques**3 sh**

Basic instruments of projective testing, particularly the Rorschach and Thematic Apperception Test, from the standpoints of basic research and the mechanics of administration and scoring.

Prerequisite: Approved certification candidacy in the School Psychology program.

2001-576 Projective Techniques II**3 sh**

Moves from the theoretical to the practical application of projective tests. Student required to administer, score and analyze individual cases. Major emphasis on the Rorschach and Thematic Apperception Test.

Prerequisite: 2001-575.

2001-578 Psychological Tests and Measurements**3 sh**

Survey of theory, construction and application of psychological tests. Open only to matriculated students.

Prerequisite: 0824-503, 2001-510 or 2001-550.

2001-580 Personality**3 sh**

Major theories and clinical and experimental findings. Open only to matriculated psychology majors.

Prerequisite: 2001-520 or 561.

2001-581 Motivation**3 sh**

Nature and development of motives and their role in behavior. Open only to matriculated psychology majors.

Prerequisite: 2001-520.

2001-582 Behavior Modification**3 sh**

Experimental findings, design of experiments, and practice in the application of learning principles to changing behavior. Student will perform some experiments.

Prerequisite: 2001-563 or equivalent.

2001-583 Sensation and Perception**3 sh**

Sensory and perceptual processes. Includes: visual, auditory and other stimuli, psychophysics and the development of perceptual abilities and the effects of learning motivation and set on perceptual processes. Open only to matriculated psychology majors.

Prerequisite: 2001-521.

2001-590 Diagnostic Case Studies**3 sh**

Learning to use diagnostic material and to write up diagnostic findings. The unique value of various diagnostic tools and the criteria for selection in relation to the present school problem.

Prerequisite: Approved candidacy in the School Psychology Certification program, 2001-574, 575.

2001-592 Special Diagnostic Techniques**3 sh**

Designed for students who are already competent in basic individual testing techniques. Specialized tests and techniques; evaluation of handicapped children.

Prerequisite: 2001-574, 575 and permission of the graduate advisor.

2001-593 Clinical Interviewing**3 sh**

Clinical interviewing under rigid supervision as an essential part of a practicum experience. Diagnostic features of interviewing and inter-personal relationships between

the psychologist and the client.

Prerequisite: Permission of the graduate advisor and instructor.

2001-600 Thesis I

4 sh

Individual research under faculty direction. Student presents his thesis proposal at a department colloquium and takes an oral examination upon completion of his thesis.

2001-620 Orientation and Observation in Special Education

2 sh

Community resources, professional roles and responsibilities and team operations. On-site visits to special classes and rehabilitation centers and special guest lectures.

2001-641 Perspectives in Human Sexuality

3 sh

Specialists lecture and discuss concepts of human sexuality: abortion; human sexuality and the mentally retarded child; world population; myths and fallacies of human sexuality; the community and sex education; sexual aberrations; touch and human sexual response; male and female sexual response; sexual problems of college students; the humanization of obstetrics; current research in sex and sex education.

2001-645 Sexual Function and Dysfunction

3 sh

Seminar in current trends and practices in sexual therapy. Historical material and research studies in the area of sexual function and dysfunction — from Freud to Masters and Johnson.

Prerequisites: 2001-542, 641, 567.

2001-660 Seminar in Educational Psychology

3 sh

Opportunity to investigate and apply the techniques of research in the psychology field.

Prerequisites: 2001-510, 560 and matriculation in Psychology.

2001-661 Practicum in School Psychology

3 sh

Supervised experience in assessment counseling and consultation procedures. Designed to increase competency in psychological techniques required in school setting.

Prerequisite: Approved certification candidacy in School Psychology program and permission of graduate advisor.

2001-662 School Psychology Externship

3 sh

Students serve as apprentice psychologists in cooperating school districts or agencies. A fully certified school psychologist, employed in the cooperating district, or an appropriate clinician and the college supervisor make periodic visits and conduct a series of seminars to be scheduled on campus.

Prerequisites: Approved certification candidacy in School Psychology program and permission of graduate advisor.

2001-663 Independent Study

1-3 sh

Research which is not part of the thesis, readings or field experiences under the supervision of any regular faculty member of the Psychology Department. On one topic during one semester for 1, 2 or 3 semester hours. The student must negotiate an agreement on the planned activities with the instructor prior to registration. Open only to matriculated psychology majors.

Prerequisite: Permission from graduate advisor and instructor.

2001-664 Practicum in Teaching Behaviorally Disturbed Children I 2 sh

Experience in teaching seriously and moderately emotionally disturbed children. Open only to matriculated majors in the program for the teaching of emotionally disturbed children.

Prerequisite: Permission of the program coordinator.

2001-665 Practicum in Teaching Behaviorally Disturbed Children II 2 sh

Continues the experience described in 2001-664. Open only to matriculated majors in the program for the teaching of emotionally disturbed children.

Prerequisite: Permission of the program coordinator.

2001-670 Introduction to Psychotherapy 3 sh

Theories, research and practices in individual and group psychotherapy; introduction to approaches to treatment of emotional maladjustment and behavioral pathology in children and their families.

Prerequisites: Certification in School Psychology or advanced standing in School Psychology Program or permission of instructor.

2001-672 Practicum in Psychotherapy 3 sh

Supervised practice in individual and group counseling and psychotherapy of children and parents; personal growth through self-understanding.

Prerequisite: 2001-670 or permission of instructor.

The following Senior Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current regular bulletin.

2001-442	Curriculum and Methods in Sex Education	3
2001-446	Today's Woman.....	3

SOCIAL SCIENCES

Graduate Advisors:	Dr. Bertha B. Quintana, Anthropology
	Dr. Margaret Reilly-Petrone, Economics
	Prof. Bertrand B. Boucher, Geography & Urban Studies
	Dr. Richard J. Barker, History
	Dr. Lois A. More, Non-Western Cultures
	Dr. Edward W. Johnson, Political Science
	Dr. Byong-Suh Kim, Sociology

The Master of Arts degree in social sciences offers concentrations in anthropology, economics, geography, history, non-western cultures, political science, sociology and urban studies. Degree candidates do a major portion of their work and prepare for a final comprehensive examination in one of these individual fields. At present, the program is designed mainly for students who wish to work toward the degree on a part-time basis. Part-time students normally carry 6 hours per semester (9 hours maximum) during the regular academic year and are encouraged to attend the summer session of the College. For graduate students in residence, twelve to sixteen hours of work each semester is considered a full time program, with twelve hours recommended for graduate assistants. A limited number of graduate assistantships is available; for information write to the Dean of Graduate Studies.

Admission Requirements

In addition to the general requirements for admission to the graduate program at Montclair State, candidates must present an undergraduate record showing a total of at least 30 semester hours in the social sciences and/or history. For candidates with weak undergraduate preparation in the field of concentration, prerequisite courses, not for graduate credit, may be required.

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Anthropology)

I.	Required Courses	9 semester hours
	* 2202-531 Human Variation.....	3
	* 2202-535 Ethnology	3
	At least one of the following:	
	* 2202-539 Prehistoric North America.....	3
	* 2202-540 Social Anthropology and History	3
	* 2202-541 Cognitive Anthropology	3
II.	Anthropology Electives	6-9 semester hours
	2202-532 Anthropology of Cities.....	3
	2202-533 Spanish Cultural Influences in the U.S.	3
	2202-534 Anthropology and Education.....	3
	2202-536 Cultural Diversity	3
	2202-537 Cultural Stability and Change.....	3
	2202-538 Ethnopsychology	3
	2202-539 Prehistoric North America.....	3
	2202-540 Social Anthropology and History	3

*Anthropology elective may be substituted for candidates with prior equivalent course experience.

2202-541	Cognitive Anthropology	3
2202-547	Woman: A Cross-Cultural Perspective.....	3
2202-601	Independent Anthropological Research.....	3

III. Related Social/Behavioral Science and/or History Electives6-9 semester hours

IV. Free Electives.....6 semester hours

V. Reading Seminar and Comprehensive Examination.....2 semester hours

2202-603	Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600, Thesis.....	4
	In lieu of the comprehensive examination.	

Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Economics)

The concentration in economics is currently under revision. Candidates interested in economics as an area of concentration should contact the chairman of the department for information.

I. Required for all but undergraduate economic majors:
2204-501 Economics Analysis.....3

II. Economics Electives.....9-12 semester hours

2204-503 Economic Problems of the Third World3

2204-508 Economics of Public Management.....3

2204-510 Urban Economics: Problems and Policies.....3

2204-540 Development in Economic Education3

2204-541 Foundations of Contemporary Economic Thought.....3

2204-542 Economic Fluctuations and Forecasting.....3

2204-543 United States in the World Economy3

2204-544 Government and Business.....3

2204-545 Economics of Labor3

III. Related Social/Behavioral Science and/or History6-9 semester hours

IV. Free Electives.....6 semester hours

V. Reading Seminar and Comprehensive Examinations.....2 semester hours

2204-603	Independent study in preparation for written examination given in March and October.	
----------	---	--

Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Geography)

It is highly recommended that candidates for the concentration in geography should have an undergraduate major or minor in geography or its equivalent from a recognized college or university. For candidates without this background it may be necessary for them to make up deficiencies in their undergraduate programs.

I. Required Courses6 semester hours

2206-520 Landscapes in Transition.....3

2206-521 Research Methods in Geography & Urban Studies.....3

2205-521	Civil War and Revolution in Chinese History	3
2205-530	Nationalism in Modern India	3
2205-532	Modernization in Japanese Cultural History	3
And one of the following:		
2207-523	The Politics of Developing Areas	3
2207-524	Africa and Asia in World Politics	3
II.	Related Social/Behavioral Science and/or History Electives	6-9 semester hours
2202-537	Cultural Stability and Change	3
2202-540	Social Anthropology and History	3
2206-503	Culture Regions	3
2208-567	Power and Social Stratification	3
III.	Free Electives	6 semester hours
IV.	Reading Seminar and Comprehensive Examination	2 semester hours
4910-603	Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Department 600 Thesis	4
		In lieu of the comprehensive examination.
Minimum: 32 semester hours		

**Requirement for the Master of Arts Degree in Social Sciences
(Concentration in Political Science)**

I.	Required Courses	3 semester hours
2207-502	Modern Political Analysis	3
II.	Political Science Electives	12-15 semester hours
2207-501	Public Administration and Public Policy	3
2207-512	Origin and Development of the Constitution	3
2207-521	History of Political Thought	3
2207-522	Great Britain and the Commonwealth	3
2207-523	Politics of Developing Areas	3
2207-524	Africa and Asia in World Politics	3
2207-551	Contemporary Constitutional Law	3
2207-552	The President and the Congress	3
2207-553	The Federal Courts	3
2207-554	American Political Thought	3
III.	Related Social/Behavioral Sciences and/or History Electives	6-9 semester hours
IV.	Free Electives	6 semester hours
V.	Reading Seminar and Comprehensive Examination	2 semester hours
2207-603	Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis	4
		In lieu of the comprehensive examination.
Minimum: 32 semester hours		

**Requirements for the Master of Arts Degree in Social Sciences
(Concentration in Sociology)**

I.	Required Courses	9 semester hours
	2208-560 Sociological Theory.....	3
	2208-568 Seminar: Sociological Research Methods I	3
	2208-571 Seminar: Sociological Inquiry	3
II.	Sociology Electives.....	9 semester hours
	2208-559 Sociology of Deviance.....	3
	2208-561 The Construction of Social Theory	3
	2208-562 Social Change.....	3
	2208-563 Self and Society	3
	2208-564 Social Planning.....	3
	2208-565 Sociology of Youth.....	3
	2208-566 The Metropolitan Community.....	3
	2208-567 Power and Social Stratification	3
	2208-569 Seminar: Sociological Research Methods II	3
	2208-570 Independent Project.....	3
	2208-572 Selected Problems in Sociology	3
	2208-573 Sociology of City Sub-Areas.....	3
	2208-574 Sociology of Cultural and Ethnic Groups.....	3
	2208-575 Sociology of Voluntary Membership Institutions.....	3
	2208-576 The Family as an Institution	3
	2208-577 Sociology of Poverty in the U.S.	3
	2208-579 Community Resources and Youth.....	3
III.	Related Social/Behavioral Science and/or History Electives	6 semester hours
IV.	Free Electives.....	6 semester hours
V.	Reading Seminar and Comprehensive Examination.....	2 semester hours
	2208-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis.....	4
	in lieu of the comprehensive examination.	
	Minimum: 32 semester hours	

Course Descriptions

Anthropology

2202-531 Human Variation

3 sh

The study of various races from the perspective of physical anthropology. Theories and explanations of human variations, racial types in the modern world, as well as misconceptions concerning race and intelligence and race and culture.

2202-532 Anthropology of Cities

3 sh

A cross-cultural investigation of urbanism and urbanization. Utilizing anthropological monographs, the comparative method reveals recurrent patterns of adaptation to urban environments. An urban, ethnographic field work research project is required.

II.	Geography Electives.....	9-12 semester hours
	2206-501 Environmental Geography.....	3
	2206-502 Problems in Economic Geography.....	3
	2206-503 Culture Regions.....	3
	2206-504 Pro-Seminar.....	3
	2206-505 Population-Resources-Environment: A Study in Human Ecology.....	3
	2206-509 Water Resource Systems.....	3
	2206-510 Urban Systems and Planning.....	3
III.	Related Social/Behavioral Science and/or History Electives.....	6-9 semester hours
IV.	Free Electives.....	6 semester hours
V.	Reading Seminar and Comprehensive Examination.....	2 semester hours
	2206-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis.....	4
	In lieu of the comprehensive examination.	
		Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Urban Studies)

I.	Required Courses.....	9 semester hours
	4905-550 Urban Contexts — A Holistic View.....	3
	4905-551 Functional Characteristics of Cities.....	3
	4905-610 Urban Studies Seminar*.....	3
*To be taken only after the candidate has completed 4905-550, 551 and 9 semester hours of Urban Studies electives.		
II.	Urban Studies Electives.....	9 semester hours
	2001-553 Urban Psychology.....	3
	2202-532 Anthropology of Cities.....	3
	2204-545 Economics of Labor and Manpower.....	3
	*2205-518 Urban History: National Trends in New Jersey Cities.....	3
	2206-510 Urban Systems and Planning.....	3
	*2206-521 Research Methods in Geography and Urban Studies.....	3
	2207-501 Public Administration and Public Policy.....	3
	2208-566 The Metropolitan Community.....	3
	2208-573 Sociology of City Sub-Areas.....	3
	2208-579 Community Resources and Youth.....	3
III.	Related Social/Behavioral Sciences and/or History Electives.....	6 semester hours
IV.	Free Electives.....	6 semester hours
V.	Reading Seminar and Comprehensive Examination.....	2 semester hours
	2206-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis.....	4
	in lieu of the comprehensive examination.	

* Recommended

Minimum: 32 semester hours

**Requirements for the Master of Arts Degree in Social Sciences
(Concentration in History)**

I.	Required Courses	3 semester hours
	2205-501 New Interpretations in History.....	3
	or	
	2205-502 History and the New Social Studies.....	3
II.	History Electives	12-15 semester hours
	2205-501 New Interpretations in History.....	3
	2205-502 History and the New Social Studies.....	3
	2205-511 Seminar in American Colonial History	3
	2205-512 The American Revolution, 1763-87	3
	2205-513 Problems of the New Nation, 1789-1828	3
	2205-514 Crisis of American Nationalism, 1828-1876	3
	2205-517 Age of Franklin D. Roosevelt	3
	2205-518 Urban History: National Trends in N.J. Cities	3
	2205-519 The U.S. in the Nuclear Age	3
	2205-520 United States—Far Eastern Relations	3
	2205-521 Civil War and Revolution in Chinese History	3
	2205-522 Revolutionary Russia, 1905-21	3
	2205-523 History of Soviet Diplomacy	3
	2205-524 History of American Business Leaders.....	3
	2205-525 History of American Labor, 1870-1970	3
	2205-526 The Industrialization of America, 1865-1900.....	3
	2205-527 The Industrialization of Europe	3
	2205-529 Europe of the Dictators, 1919-39.....	3
	2205-530 Nationalism in Modern India.....	3
	2205-532 Modernization in Japanese Cultural History	3
	2205-533 French Revolution and Napoleon.....	3
	2205-534 France of the Republics	3
	2205-537 19th Century European Intellectual History	3
III.	Related Social/Behavioral Science Electives	6-9 semester hours
IV.	Free Electives	6 semester hours
V.	Reading Seminar and Comprehensive Examination.....	2 semester hours
	2205-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis	4
	In lieu of the comprehensive examination.	
	Minimum: 32 semester hours	

**Requirement for the Master of Arts Degree in Social Sciences
(Concentration in Non-Western Cultures)**

I.	Required Courses	15-18 semester hours
	2202-535 Ethnology	3
	or	
	2202-536 Cultural Diversity	3
	And at least two of the following:	
	2205-520 United States—Far East Relations	3

2202-533 Spanish Cultural Influences in the U.S.**3 sh**

The cultural heritage of Spanish-speaking America. Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

2202-534 Anthropology and Education**3 sh**

Advanced seminar on the relationship of culture to learning, and of anthropology to educational issues and problems. Group work and guided individual research on the multi-cultural use of anthropological concepts and methodologies in the study of socialization and education.

Prerequisite: 6 semester hours in graduate anthropology courses, or permission of the instructor.

2205-535 Ethnology**3 sh**

A graduate introduction to the "science of peoples, their cultures and life histories as groups." Ethnographic and ethnological methodology and theory. Primarily for graduate students with limited or no previous course work in cultural anthropology.

2202-536 Cultural Diversity**3 sh**

Descriptive, historical and theoretical anthropological works provide the basis for studying likenesses and differences among folk and urban cultures, their historical development, and interrelationships between differing aspects of culture.

Prerequisite: 2202-535 or equivalent.

2202-537 Cultural Stability and Change**3 sh**

Emphasis on the dynamics of cultural preservation, transmission, and change. Factors and conditions which retard and/or stimulate culture change in transcultural perspective; the psycho-cultural consequences of rapid change.

Prerequisite: 2202-535 or equivalent.

2202-538 Ethnopsychology**3 sh**

Interdisciplinary course on convergencies of theoretical and methodological concepts from anthropology and psychology. Personality in culture; cultural influences on cognition; personality under stress; cultural psychiatry; and creativity in culture. Interdisciplinary field work.

Prerequisite: Previous course work in anthropology and psychology, or permission of the instructor.

2202-539 Prehistoric North America**3 sh**

General background in native American archaeology, and theory and method in this subdiscipline. Selected culture areas and problems relating to time depth, cultural interaction, and the nature of archaeological evidence north of Mexico.

2202-540 Social Anthropology and History**3 sh**

The relationship of social anthropology to history. The study of history as a cultural system; sources and methods utilized in reconstructing the histories of preliterate societies and the "inarticulate" sectors in complex societies.

2202-541 Cognitive Anthropology**3 sh**

How different peoples organize and use their cultures; data from formal ethnography, semantic analysis, ethnoscience and componential analysis for purposes of studying culture and building culture theories. (Recommended for M.A. candidates in the behavioral and social sciences.)

Prerequisite: Previous course work in ethnology, ethno-psychology or linguistics.

2202-547 Woman: A Cross-Cultural Perspective**3 sh**

Physiological and psychological aspects of women studied cross-culturally, and their implications for contemporary society. Morphological and psychological developments from conception to death in various cultures, inferences about the roles of women in American society. An interdisciplinary course.

2202-601 Independent Anthropological Research**3 sh**

Under faculty guidance, the student works independently throughout the academic year on a delimited problem in anthropology. Course includes presentation of proposal, execution and write-up of research, and oral defense of findings.

Prerequisite: Permission of the graduate advisor and instructor.

2202-603 Reading Seminar in Anthropology**2 sh**

Required of all M.A. candidates concentrating in anthropology. Directed independent study in preparation for 3 hour comprehensive examination.

Economics

2204-501 Economic Analysis**3 sh**

Resource allocation and income distribution implications of households and firms under varying degrees of competition: various factors that determine the level of employment, income, and prices for the economy; the role of monetary and fiscal policies.

Prerequisite: Not open to undergraduate economics majors.

2204-503 Economic Problems of the Third World**3 sh**

A survey of major economic problems of the Third World. The economic structure of developing countries and general theories of economic development. Evaluation of policy alternatives for their development. Possible economic relationships of First and Second Worlds with the Third World.

Prerequisite: Undergraduate course in economics or permission of the instructor.

2204-508 Economics of Public Management**3 sh**

Application of capital theory in the decision-making processes of government; alternative approaches to government project evaluation and important practical issues encountered by state development planners. Specific applications of project analysis in the area of physical and human resource management such as water resource management, public health, and education.

Prerequisite: 2204-501 or equivalent.

2204-510 Urban Economics: Problems and Policies**3 sh**

The location of economic activities, the growth of cities and the origins of some urban problems in a market economy. Limited emphasis on the problems of location and congestion due to agglomeration in non-market economics.

Prerequisite: 2204-501 or permission of instructor.

2204-540 Development in Economic Education**3 sh**

Insights into recent experiments incorporating economic education into the curriculum, K-12; restructuring of curriculum to promote economic understanding. Materials, written and audio-visual, designed for economic education. Guest lectures supplement the experience of the course instructor.

Prerequisite: 2204-501 or equivalent.

2204-541 Foundations of Contemporary Economic Thought **3 sh**
Antecedents of current economic theory; economics as a cumulative science; the works of the creative economists; the uses and limitations of economic theory.
Prerequisite: 2204-501 or equivalent.

2204-542 Economic Fluctuations and Forecasting **3 sh**
Theories to account for variations in business activity. Macroeconomic models and other forecasting approaches; economic fluctuations in the United States; proposals for reducing fluctuations. Harrod Domar model; Modern Theory of Growth.
Prerequisite: 2204-501 or equivalent.

2204-543 United States and the World Economy **3 sh**
Principles of international finance, monetary relations and trade; contemporary international monetary and trade problems and policies; the economic aspects of current American foreign policy.
Prerequisite: 2204-501 or equivalent.

2204-544 Government and Business **3 sh**
The evolution of government influences on the functioning of the American economy; the causes and consequences of government regulation and control; the importance of economic analysis; the foundation of public policies.
Prerequisite: 2204-501 or equivalent.

2204-545 Economics of Labor **3 sh**
Principal trends in the industrial and occupational distribution of labor; current developments in labor-management relations in both private and public sectors; market trends and institutional factors that determine employment, wage rates, fringe benefits and industrial peace.
Prerequisite: 2204-501 or equivalent.

2204-603 Reading Seminar in Economics **2 sh**
Required of all Masters Degree candidates concentrating in Economics, this seminar entails directed independent study in preparation for a 3-hour written comprehensive examination.

The following Senior-Graduate courses may be elected with special permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

- 2204-403 Comparative Economics Systems3
- 2204-415 Economics of Social Problems.....3

Geography and Urban Studies

2206-501 Environmental Geography **3 sh**
Spatial distribution of energy in the atmosphere treated in terms of natural factors and man's induced changes (atmospheric pollution). Incoming sun energy as modified by man is traced through the atmosphere, vegetation, soil and water.
Prerequisite: 2206-520 or 521

2206-502 Problems in Economic Geography **3 sh**
Research course examines spatial patterns of economic activities. Stress on current methodology and research interests.
Prerequisite: 2206-520 or 521.

2206-503 Culture Regions**3 sh**

Seminar investigation of man's role in changing the face of the earth. Emphasis on spatial perception, and cultural attitudes towards space as well as the diffusion process. Prerequisite: 2206-520 or 521.

2206-504 Pro-Seminar in Geography**3 sh**

Research on selected problems in Geography. Problems will vary according to instructor.

Prerequisite: 2206-520 or 521.

2206-505 Population, Resources, Environment – A Study in Human Ecology**3 sh**

Discussion of population in relation to the physical environment, objectives and skills of numerous culture groups will be examined to clarify existing regional variations in the man-land relationship.

Prerequisite: 2206-520 or 521.

2206-509 Water Resource Systems**3 sh**

The spatial patterns of the water resource, both surface and ground water. Processes affecting availability and techniques of estimation.

Prerequisite: 2206-520 or 521.

2206-510 Urban Systems and Planning**3 sh**

The complexity of the city and its modification by means of planning; the systems approach to urban study; the ecological base; different models of urban systems; the impact of technological change; the hierarchy of urban regions; planning in the existing systems and creating new ones.

Prerequisite: 2206-520 or 521.

2206-520 Landscapes in Transition**3 sh**

The field in historical perspective, with emphasis upon contemporary trends; philosophical roots and quest for theory. Analyzes theory and methods of application and their relationships in order to understand the role of applied in contrast to theoretical geography.

2206-521 Research Methods and Techniques in Geography and Urban Studies**3 sh**

Advanced research techniques, beginning with census reports, government surveys and reports from other agencies. Field research both cultural and physical; mapping techniques; the design of appropriate scale and data transformation to familiarize the range of possibilities and the need for careful choice of data and maps. Computer applications in geographic problem solving.

2206-603 Reading Seminar in Geography and Urban Studies**2 sh**

Required of all Master's Degree candidates concentrating in Geography and Urban Studies, this semester entails directed independent study in preparation for a 3-hour written comprehensive examination.

4905-550 Urban Contexts: A Holistic View**3 sh**

Interdisciplinary study of urbanization, the processes that produce and shape urban agglomerations. From this holistic perspective the interaction of different social, cultural, economic, political and planning forces examined for their impact upon the resulting system.

Prerequisite: Undergraduate background in social sciences.

4905-551 Functional Characteristics of Cities**3 sh**

The spacing, location and size of cities, the role of transportation in city rhythms and intra- and inter-city relationships. Urban design planning juxtaposed with multi-faceted decision-making processes for an examination of their relative position in the management of urban systems.

Prerequisite: Undergraduate background in social sciences, 4905-550.

4905-610 Urban Studies Seminar

The seminar is designed to analyze concepts and contents in order to formulate a holistic view of the city. Benchmark papers and research frontiers will be investigated.

Prerequisites: 4905-550, 551 and 9 semester hours of urban courses.

Partial list of electives acceptable for the concentration in Urban Studies.

2001-553 Urban Psychology

2001-555 Psychological Aspects of Poverty

2202-533 Spanish Culture in the U.S. Today

2204-545 Economics of Labor

2205-518 Urban History of Northern New Jersey

2205-526 The Industrialization of America, 1865-1900

2206-510 Urban Systems and Planning

2206-521 Research Methods and Techniques in Geography and Urban Studies

History

2205-501 New Interpretations in History**3 sh**

Designed to help teachers keep up to date in the fields of American, European and Non-Western history. Major trends and developments in the study of history in the light of recent representative examples of historical research and interpretation.

Prerequisite: Open only to history candidates or students with Social Studies certification.

2205-502 History and the New Social Studies**3 sh**

Designed to assist teachers, administrators and supervisors in acquiring a comprehensive view of modern materials, methods and curricula in history and the social sciences. Critical evaluation; implications for total school programs and for actual use in the classroom.

Prerequisite: Open only to students with Social Studies certification, or permission of the instructor.

2205-511 Seminar in American Colonial History**3 sh**

The forces and conditions of the colonial period which contributed to the shaping of American political and economic institutions, social practices and ideals, intellectual outlooks, and attitudes toward Europe.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

2205-512 The American Revolution, 1763-87**3 sh**

The causes and course of the American Revolution from both British and American viewpoints, including analysis of economic, political, social and intellectual factors.

- 2205-513 Problems of the New Nation, 1789-1828** 3 sh
The growth of political institutions under the Constitution, the gaining of respect as a new country in the family of nations, the establishment of economic credit, and the rise of American nationalism.
- 2205-514 The Crisis of American Nationalism, 1828-1876** 3 sh
The crisis in American nationalism from Jackson through Reconstruction as the country's Constitution, party system, and social structure contended with the disruptive effects of territorial expansion, the factory system, slavery and the new immigration.
- 2205-517 Age of Franklin D. Roosevelt** 3 sh
An opportunity to study that part of recent American history centering about Franklin Delano Roosevelt. While concentrating on domestic aspects of American life, attention is given also to foreign affairs and their impact on the daily lives of Americans.
Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.
- 2205-518 Urban History: National Trends in New Jersey Cities** 3 sh
An advanced survey of the urban dimension in American history and of urban history as a discipline. Late 19th and 20th century national trends are pin-pointed within the development of Paterson, Passaic, Jersey City, Newark and their suburbs.
Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.
- 2205-519 The United States in the Nuclear Age** 3 sh
The role of the United States in world affairs in the period 1939 to the present; the impact of domestic affairs on foreign policy.
Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.
- 2205-520 U.S.-Far Eastern Relations** 3 sh
United States relations with China and Japan, 1842 to the present; the men who formulated and implemented U.S. foreign policy.
- 2205-521 Civil War & Revolution in Chinese History, 1911-1949** 3 sh
The transformation of China from Empire to Peoples Republic; Chinese concepts of revolution and the intellectual, political and social changes which preceded the formation of the Peoples Republic in 1949.
- 2205-522 Revolutionary Russia, 1905-1921** 3 sh
The historical forces of 19th and 20th century Russia which led to the Bolshevik Revolution of November, 1917 and to the consolidation of Soviet power by 1921.
- 2205-523 History of Soviet Diplomacy** 3 sh
Changes in the ideological determinants of Soviet diplomacy contrasted with fluctuations in internal and external political and economic policies. Contributions of leading Soviet statesmen to diplomatic history.
- 2205-524 History of American Labor, 1870-1970** 3 sh
The American worker from the period after the Civil War to the present, with concentration on social, political and economic behavior as well as the union movement.
- 2205-526 The Industrialization of America, 1865-1900** 3 sh
The causes and nature of the industrialization of the American economy after the Civil War; factors responsible for rapid economic growth; the impact of changing productive

techniques on American institutions and human welfare.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

2205-527 The Industrialization of Europe **3 sh**

European economic development with major attention to the period since about 1750; comparing economic growth during the 19th and 20th centuries in Britain, France, Germany, Italy and Russia.

2205-529 Europe of the Dictators, 1919-1939 **3 sh**

The political, social, economic and intellectual developments in the major states of western Europe during the interwar period, with emphasis on varieties of fascism.

2205-530 Nationalism in Modern India **3 sh**

A cultural and political history of India from 1800 to the present; the contributions of Hindu nationalism and British liberalism to the Indian independence movement and the post-1947 democratic experiment.

2205-532 Modernization in Japanese Cultural History **3 sh**

Modernization in East Asia with focus on Japan. Japanese experience in adjusting new world forces of the 19th and 20th centuries considered against the background of her traditional values and institutions. Comparisons with China and Korea.

2205-533 French Revolution and Napoleon **3 sh**

The background of the French Revolution, its changing course and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon. 1799-1814.

2205-534 France of the Republics **3 sh**

The development of modern France since 1870; political, economic and intellectual conditions and trends through the Third, Fourth and Fifth Republics.

2205-537 Nineteenth Century European Intellectual History **3 sh**

Romantic, utilitarian, conservative, liberal and early existential streams of thought in 19th century Europe; the impact of these intellectual movements on European society.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

2205-603 Reading Seminar in History

Required for all master's degree candidates concentrating in History. This seminar entails directed independent study in preparation for a three-hour written comprehensive examination in the area of concentration. Candidates should register for the seminar in the semester preceding the examination date:

Registration	Examination
Fall	March
Spring	October

Political Science

2207-501 Public Administration and Public Policy **3 sh**

Literature and developments in the field of public administration from Woodrow Wilson to the current comparative public administration movement. Techniques of

administrative management, and personnel and financial administration in the federal bureaucracy.

Prerequisite: An undergraduate course in administration or permission of the instructor.

2207-502 Modern Political Analysis

3 sh

Methodologies and orientations that have guided the study and analysis of political phenomena. Utility of methods and the validity of theories are examined by reference to data related to specific political systems. Perspective is comparative and theoretical. Prerequisite: 2207-300 or equivalent, or permission of the instructor.

2207-512 Origin and Development of the U.S. Constitution

3 sh

The roots and influences that determine the nation's basic political document. The role of the Marshall Court in shaping the Constitution.

Prerequisite: A course in American Government or permission of the instructor.

2207-521 History of Political Thought

3 sh

Systematic analysis of the three main patterns of political discourse: a) traditions of the order, b) freedom and society, and c) pre-Socratic thinkers to Herbert Marcuse. Leading concepts of each tradition related to their historical and institutional contexts.

Prerequisite: A course in political theory or permission of the instructor.

2207-522 Great Britain and the Commonwealth

3 sh

Origins, membership and working institutions of the British Commonwealth of Nations. Problems of the Commonwealth since 1945, in light of Britain's altered position in international and European affairs.

2207-523 The Politics of Developing Areas

3 sh

Introduction to the field of political stability and change in the world's developing areas. Theoretical and empirical factors that have contributed to the contemporary and continuing search for political modernization in the emerging nation-states of Africa, Asia and Latin America.

2207-524 Africa and Asia in World Politics

3 sh

The position and role of African and Asian nation-states in contemporary international relations; mutual relations; their encounters with the major powers; involvement in general international organizational and diplomatic activity and domestic political and economic factors that affect or underlie their international interactions.

2207-551 Contemporary Constitutional Law

3 sh

The Supreme Court's decisions in the area of public law. Critical analysis and in-depth study of the first Ten Amendments, especially as related to the Court's recent decisions.

Prerequisite: A course in Constitutional Law or permission of the instructor.

2207-552 The President and Congress

3 sh

Organization, structure and powers of the national executive and legislative branches of government. Emphasis on legislative executive relationships, nature and functioning of the legislative powers, respective roles of the President and Congress in the formulation of public policy in a modern democracy.

Prerequisite: A course in American Government or permission of the instructor.

2207-553 The Federal Courts

3 sh

The federal courts as a political subsystem: court organization, civil and criminal

procedures, judicial behavior of federal judges, interactions between federal courts, relations with clientele groups and other branches of the federal government, the flow and content of litigation, and relations with state court systems.

Prerequisite: A course in American Government or State and Local Government or permission of the instructor.

2207-554 Seminar in American Political Thought **3 sh**

The various interpretations of American political thought. Nature and limitations of the liberal ethos underlying the American political and constitutional system; the controversy over the "bias" of American pluralism.

Prerequisite: A course in American Political Thought or permission of the instructor.

2207-603 Reading Seminar in Political Science **2 sh**

Required of all master's degree candidates concentrating in Political Science, this seminar entails directed independent study in preparation for a three-hour written comprehensive examination.

Two of the allowable Senior-Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
2207-400 American Constitutional Law I	3
2207-401 American Constitutional Law II	3
2207-402 Government and Politics of Africa	3
2207-403 Governments and Politics of the Far East.....	3
2207-404 Governments and Politics of South Asia.....	3
2207-405 Governments and Politics of Latin America	3
2207-406 Governments and Politics of the Middle East	3
2207-407 Government and Politics of the U.S.S.R.....	3
2207-408 The Development of Political Thought to Marxism.....	3
2207-409 Modern Political Thought.....	3
2207-410 Directed Studies.....	3
2207-411 Black Politics in America.....	3
2207-412 Government and Politics in Communist East Europe	3
2207-413 Africa and Asia in World Politics	3
2207-414 Law in Society Civil Law.....	3
2207-415 Law and Society: Criminal Law	3
2207-425 Politics of the Federal Bureaucracy.....	3
2207-430 International Law.....	3

Sociology

2208-559 Sociology of Deviance **3 sh**

The efforts of such people as Lemert, Becker, Morton, Matze and others to develop theories concerning crime, delinquency, mental illness and other issues which can be viewed as social problems.

2208-560 Sociological Theory **3 sh**

The practical and philosophical methods of the seminal sociological theorists, investigated and evaluated in terms of many conceptions of adequate scientific procedure.

2208-561 The Construction of Social Theory**3 sh**

Sociological theory as an artful practice. Theorists, such as Durkheim, Weber, Marx, Freud, Skinner and Merton discussed as courses of action.

2208-562 Social Change**3 sh**

The dynamics of contemporary societies: sacred and secular movements, technological and cultural change, protest and revolution, and 20th century nationalism. The effect of change considered in relation to individuals, groups, institutions and total societies.

2208-563 Self and Society**3 sh**

The relationships between the human individual and his social environment; the formation, maintenance and transformation of self or identity; the structure and processes of small groups; symbolic communication; role theory, cognitive dissonance and inter-group conflict.

2208-564 Social Planning**3 sh**

The many elements and considerations in planning for a community, a state or a nation. The social context of planning; projective techniques; budgets, master plans, development programs and area proposals. The human, the economic, the ecological. Students will be expected to undertake a social planning project. A basic knowledge of statistics and the use of statistical data is desirable.

2208-565 Sociology of Youth**3 sh**

Socialization processes acting upon young people; the role of family, neighborhood, school and community; the effects of failures in these socializing agencies; changing relations among age grades; quantitative studies of the culture of youth with comparisons to other age grades.

2208-566 The Metropolitan Community**3 sh**

The many dimensions of the metropolitan community: human factors, problems an area faces, political difficulties, interaction between the center city and the other parts of the community. Emphasis on New York-New Jersey.

2208-567 Power and Social Stratification**3 sh**

This course focuses on several conceptual, theoretical and empirical approaches to sociological studies of power and social inequalities. Each is studied as it was formulated by classical theorists and refined by contemporary researchers on power, power elite, the ruling class, class interests, class consciousness, alienation, class struggle, and social mobility, etc., through comparative perspectives.

Prerequisite: One or more Sociology courses at 500 level or permission of instructor.

2208-568 Social Research Methods I**3 sh**

Elements of sociological methods: study design, hypotheses development, data collection techniques, use of primary and secondary sources, field techniques. Participation in a multi-city field research laboratory project designed and executed jointly with graduate students and faculty of cooperating colleges. The field project is a unique experience because of the diversity of communities investigated, and because of participation with a team of researchers.

2208-569 Social Research Methods II**3 sh**

Continuation of Social Research Methods I. The elements of method included are: coding techniques, analysis and scientific report writing.

2208-570 Independent Projects**3 sh**

Each student seeking an M.A. degree with an emphasis in Sociology will be guided in the development and execution of an independent project. The faculty advisor will be chosen by mutual agreement of the student and faculty member to guide the project, and advise on the data to be collected in the Social Research Laboratory field project. The student will enroll for Independent Projects in the Fall semester in which he enters the Social Research Laboratory. This enables the student to obtain individual guidance on the selection and design of the independent project.

2208-571 Seminar: Sociological Inquiry**3 sh**

Develops competences needed for the critical assessment of sociological literature, the formulation of productive research problems and the sophisticated pursuit of inquiry. Intensive study of a number of readings dealing with certain crucial areas of sociological concern. Also gives students coming into Sociology concentration without a broad background remedial experience in dealing with advanced concepts, theories and methods.

Prerequisite: Permission of instructor.

2208-572 Selected Problems in Sociology**3 sh**

The intensive exploration of a general problem in Sociology. Participants contribute research into an aspect of the problem. Formed at the initiative of a department member or in response to student's interest with consent of the instructor.

2208-573 Sociology of the City Sub-Areas**3 sh**

The social forces in the inner city and other sub-areas; existing and emerging cultural strengths and positive supportive patterns; problems related to poverty, housing, education, employment, leisure and aesthetics.

2208-574 Sociology of Cultural and Ethnic Groups**3 sh**

The major cultural and ethnic groups in American society; relationships among groups; the significance of these relationships to the structure of society. The student will prepare an in-depth report of the group of his choice.

2208-575 Sociology of Voluntary Membership Institutions**3 sh**

Descriptive and theoretical analysis of constructive action patterns in leisure and other voluntary membership institutions; structural and functional significance of these behaviors to the American social order.

2208-576 The Family as an Institution**3 sh**

The family unit as an institution within society; the family in contemporary American society; the family sociologically examined as an institutional form, a social system in process and a socializing agency.

2208-577 Sociology of Poverty in the U.S.**3 sh**

Poverty as a major domestic problem; the causes and effects of social deprivation; historical and contemporary efforts and its solution.

2208-579 Community Resources and Youth

Resources for the healthy as well as the deviant child, in the family and neighborhood, in addition to services provided by public and private agencies; relevant federal and state legislation.

2208-603 Reading Seminar in Sociology**2 sh**

Required for all master's candidates concentrating in sociology who elected to take a comprehensive examination. Candidates should register for the seminar in the semester preceding the examination date.

SPANISH

Graduate Advisor and Department Chairman: Dr. Norman Fulton

The program is designed to prepare students for careers in teaching, for research in language and literature, and for other professional positions demanding a knowledge of Spanish: interpreters; translators; consular service and diplomatic service in Spanish-speaking countries; Spanish newspaper and magazine editors and organizers of projects for Spanish-speaking communities; representatives of commercial companies in Spain and Spanish America. The Master of Arts degree opens opportunities to teach in high school and community colleges.

Admission Requirements

The Master of Arts program in Spanish is open to students who have completed at least 24 semester hours or the equivalent of undergraduate Spanish and hold a bachelor's degree. These students must take the Graduate Record Examination in Spanish prior to acceptance into the program.

Students who hold a bachelor's degree or its equivalent may enroll in graduate courses without obligation to follow a Master's degree program, if they have 24 credit hours or the equivalent in Spanish.

After acceptance, candidates will consult the graduate advisor to plan their programs.

Requirements for the Master of Arts Degree in Spanish

- | | | |
|------|--|-------------------|
| I. | Required Courses | 5 semester hours |
| | 1105-505 History of the Spanish Language | 3 |
| | *1105-603 Research..... | 2 |
| II. | Major Field of Specialization ** | 18 semester hours |
| III. | Minor Field of Specialization ** | 9 semester hours |

Peninsular Area

1105-516	Medieval Spanish Literature to Fifteenth Century.....	3
1105-521	Pre-Renaissance and Pre-Lopista Theater.....	3
1105-522	Theater of the Golden Age	3
1105-523	Prose and Poetry of the Golden Age.....	3
1105-524	Cervantes.....	3
1105-525	La Ilustracion and Romanticism.....	3
1105-526	Realism in Spain.....	3
1105-527	The Generation of '98.....	3
1105-533	Contemporary Spanish Theater	3
1105-534	Spanish Prose of the Twentieth Century	3
1105-535	Contemporary Spanish Poetry.....	3

Spanish-American Area

1105-540	Colonial Spanish-American Literature.....	3
1105-541	Spanish-American Literature of the Nineteenth Century.....	3
1105-542	Spanish-American Novel of the Twentieth Century.....	3

*Students interested in writing a thesis should consult the graduate advisor. A thesis carries 4 semester hours credit.

**Students elect either Peninsular or Spanish-American area as a major; the other area becomes a minor.

1105-543	Spanish-American Theater of the Twentieth Century.....	3
1105-546	Modernismo in Spanish America	3
1105-548	Contemporary Spanish-American Novel.....	3
1105-549	Contemporary Spanish-American Short Story.....	3
1105-551	Contemporary Spanish-American Poetry.....	3
1105-560	Topics in Spanish-American Literature.....	3

- IV. Upon completion of 32 semester hours, the candidate will apply for the comprehensive examination, with the understanding that he will devote either one semester or a summer preparing for the examination.

The written examination of 6 hours, offered in April and November, covers the history of the Spanish language, literature of Spain and literature of Spanish America. The 6 hours are divided between the major and minor areas on separate test days one week apart.

Minimum: 32 semester hours

Course Descriptions

1105-505 History of the Spanish Language 3 sh

The Spanish language from its origins to the present. Phonological, structural and lexical evolution from vulgar Latin, following the process of transformation from its first documentary appearance.

Peninsular Area

1105-516 Medieval Spanish Literature to Fifteenth Century 3 sh

The outstanding prose and poetry of Spain from the XIth century to the XVth century paying attention to the peculiar three-cultured society of the period.

1105-521 Pre-Renaissance and Pre-Lopista Theater 3 sh

Origins and developments of the Spanish Theater to the beginning of the Golden Age; thematic study of major playwrights including Juan del Encina, Lucas Fernandez, Gil Vicente and Torres Naharro.

1105-522 Theater of the Golden Age 3 sh

Structural and thematic study of the comedia through readings and discussion of representative plays of the period including Lope, Tirso, Calderon, Alarcon and Moreto.

1105-523 Prose and Poetry of the Golden Age 3 sh

Critical readings of the picaresque and pastoral novels, humanistic writings of Luis Vives, Alfonso and Juan Valdes, and Garcian; textual analysis of the poetry of the Renaissance and Baroque from Garcilaso to Quevedo.

1105-524 Cervantes 3 sh

The prose writings and drama of Cervantes focusing on his unique artistic achievement. Readings of El Quijote; Novelas Ejemplares; Parsiles y Segismunda, his comedias, entremeses.

1105-525 La Ilustracion and Romanticism 3 sh

The erudition of the enlightenment as symbolized by Feijoo, Jovellanos; Neo-classicism; the romantic movement exemplified by Larra, el Duque de Rivas, Espronceda, Garcia Gutierrez, Zorrilla, Alarcon; costumbrismo.

1105-526 Realism in Spain**3 sh**

Problems germane to 19th century Spain, as shown by Ferman Caballero, Pereda, Blasco Ibanez. Particular emphasis upon the works of Perez Galdos.

1105-527 The Generation of '98**3 sh**

A reprobing into the roots of Spain through the works of Unamuno, "Azorin," Baroja, Valle-Inclan, Benavente, Ortega y Gasset and Maeztu.

1105-533 Contemporary Spanish Theater**3 sh**

Representative plays from Benavente to Sastre read and analyzed. Critical study of the evolution of theater in light of style, technique and thought of these playwrights.

1105-534 Spanish Prose of the Twentieth Century**3 sh**

Works of the Generations of 1927 and 1936: Lorca, Casona. Trends in contemporary prose: Buero Vallejo, Sastre, Cela, Zunzunegui, Delibes, Goytisolo, Laforet, Matute and selected younger writers of the present generation.

1105-535 Contemporary Spanish Poetry**3 sh**

Unamuno, Machado, Jimenez; the poetry of the "Generation of '27" and selective readings of younger poets of today. Emphasis on textual analysis.

Spanish-American Area

1105-540 Colonial Spanish-American Literature**3 sh**

Indigenous literature such as the Popol Vuh, Rabinal Achi, and nahuatl and quechua poetry. The chronicles, the Inca Garcilaso and epic poetry. Sor Juana Ines de la Cruz and Concolorcorvo.

1105-541 Spanish-American Literature of the Nineteenth Century**3 sh**

The evolution from Neoclassicism and Romanticism to Naturalism and Realism in prose and poetry. Fernandez de Lizardi, Heredia, La Avellaneda, Matto de Turner, Sarmiento and the gaucho poets.

1105-542 Spanish-American Novel of the Twentieth Century**3 sh**

Study of the aesthetic novels of Modernismo, novels of Mexican Revolution, psychological novel and novel of the land and of social reform.

1105-543 Spanish-American Theater of the Twentieth Century**3 sh**

New trends in the Spanish-American theater—the theater of the absurd and the theater of cruelty, and the fantastic. Readings of such representative playwrights as Emilio Carballido, Carlos Solorzano, Elena Garro, Osvaldo Dragun, Griselda Gambaro.

1105-546 Modernismo in Spanish America**3 sh**

Critical evaluation of the "Modernista" movement in Spanish-American poetry and prose (1870-1920). The genesis, technique, characteristics and principal writers of the movement.

1105-548 Contemporary Spanish-American Novel**3 sh**

Critical examination of representative works of contemporary writing in Spanish America. The relation of the Spanish-American novel to the genre in Europe, Spain and North America.

1105-549 Contemporary Spanish-American Short Story**3 sh**

Study of the tendencies in the contemporary short story from the Post-Modernist period; realism and fantasy; the short story as a social document.

1105-551 Contemporary Spanish-American Poetry**3 sh**

Individual works of poetry as autonomous linguistic and artistic creations and as part of a general renaissance in culture. Post-modernism, vanguardism and post-vanguardism.

1105-560 Topics in Spanish-American Literature**3 sh**

Selected specialized topic, either of a period, genre, or particular author, in Spanish-American literature. Topic will change with each offering.

1105-603 Research**2 sh**

Seminar designed primarily to provide an opportunity for graduate students in foreign languages to investigate and apply techniques of research.

Prerequisite: Completion of at least 24 semester hours toward the Master of Arts.



SPECIAL EDUCATION

Coordinator: Dr. Warren Heiss (Communication Sciences and Disorders)
 Graduate Advisors: Dr. Terry Schon (Audiology and Teacher of the Deaf)
 Dr. Harold Scholl (Teacher of the Handicapped)
 Dr. Walter R. Duryea (Teacher of the Socially and
 Emotionally Handicapped)

An interrelated program, administered by a coordinating committee, has been established to epitomize the professional team interaction concept and to minimize the fragmentation of special programs as they are so often constituted. Specialists who train together and learn together, will hopefully be able to work together in the interests of providing the best possible education for handicapped children. We feel that it is only through developing an understanding of, and appreciation for, what each specialist has to contribute that true cooperation among professional workers will be realized.

All students in the interrelated programs in special education take the same 17 semester hours in basic and core courses. An additional 21 semester hours are taken in the field of specialization.

The programs in special education are described in the catalog under the department in which the concentration is administered. All inquiries and initial interviews should be with the Coordinator of the Special Education programs.

Specialization:

Speech Pathology
 The Hard of Hearing and the Deaf
 Learning Disabilities
 Emotionally Disturbed

Refer to:

pages 36, 38, 45
 pages 36, 38, 42
 pages 38, 39, 40, 44
 page 40

SPEECH AND THEATER

Graduate Advisor: Dr. Clyde W. McElroy
Department Chairman: Professor Karl R. Moll

Graduate students may pursue a Master of Arts degree to enrich professional activity, to prepare for further graduate study or to increase their skills as speech and theater teachers.

The program is flexible and the candidate may concentrate in one of three areas: theater, speech, and public media arts. A student may also work in all areas if he wishes. The latter approach is frequently used by the graduate who is a secondary school teacher. Graduate students will consult with the graduate advisor in selecting courses that will best prepare them in their areas of concentration.

The department's facilities include a 1,000-seat major theater and a flexible studio theater, both with remote-control pre-set switchboards; a well-equipped scene shop; extensive costume and prop collections, with work rooms; expanding television and film workshop studios and extensive recording and playback equipment.

Admission Requirements

Students wishing to matriculate as speech and theater majors must have completed a major or the equivalents from the following areas: theater, oral interpretation, speech, or mass communication. It is assumed that most of this work will have been in the area selected for graduate concentration. Some students may need to improve their preparatory backgrounds through undergraduate courses for which credit is not given.

Requirements for the Master of Arts Degree in Speech and Theater

- I. Core Courses7-9 semester hours
 - 1506-501 Survey of Research Methods3
 - 0603, 1007 or 1506-600 Thesis.....4
 - or non-thesis option: selected courses recommended by
Graduate Committee6
- II. Elective Courses within the Concentration19 semester hours

(Concentration in Theater)

- Emphasis in either Technical Theater or Acting/Directing
- 1007-500 Independent Study..... By arrangement
 - 1007-504 Contemporary Experimental Theater3
 - 1007-507 Seminar in Dramatic Production3
 - 1007-508 Internship in Dramatic Production3-7
 - 1007-513 Modern and Contemporary Theater History.....3
 - 1007-514 Non-Western Drama and Theater.....3
 - 1007-517 Theater Criticism.....3
 - 1007-525 Advanced Acting Workshop3
 - 1007-535 Advanced Directing Workshop3
 - 1007-545 Scenic Design I: The Legitimate Theater3

1007-546	Scenic Design II: The Performing Arts	3
1007-554	Stage Lighting Design.....	3
1007-555	Advanced Problems in Technical Production.....	3
1007-575	Seminar in Costume Design & Construction.....	3
1007-580	Theater Management.....	3
1007-599	Independent Study.....	By arrangement
1007-600	Thesis	4
1506-504	Advanced Applied Phonetic Study	3
1506-509	Special Problems in Speech and Theater.....	3
1506-565	Advanced Oral Interpretation.....	3

(Concentration in Speech)

1506-500	Independent Study.....	By arrangement
1506-501	Survey of Research Methods	3
1506-503	Advanced Voice and Speech Improvement.....	3
1506-504	Advanced Applied Phonetic Study	3
1506-509	Special Problems in Speech and Theater.....	3
1506-511	Revolutionary Rhetoric.....	3
1506-519	Seminar in Rhetorical Criticism.....	3
1506-521	Competitive Forensics.....	3
1506-533	Lecture and Lecture Recital	1
1506-536	Seminar in Persuasion.....	3
1506-560	Internship in Oral Communication	3-7
1506-565	Advanced Oral Interpretation.....	3
1506-599	Independent Study.....	By arrangement
1506-600	Thesis	4
0603-581	The Broadcast Media and Mass Culture	3

(Interdisciplinary Concentration in Public Media Arts)

A study of the forces affecting the exchange of information with the public and the techniques utilized in transmission.

0603-500	Independent Study.....	By arrangement
0603-510	Television Production I	3
0603-511	Television Production II	3
0603-580	Internship in Public Media Arts	3-7
0603-581	The Broadcast Media and Mass Culture	3
0603-582	Techniques of Broadcast Communication	3
0603-599	Independent Study.....	By arrangement
0603-600	Thesis	4
1506-511	Revolutionary Rhetoric.....	3
1506-519	Seminar in Rhetorical Criticism.....	3
1506-533	Lecture and Lecture Recital	1

In addition, the graduate student in this concentration should select six to nine hours of related graduate courses from the total College offerings, with the advisor's permission. Prerequisites required in these courses can be taken as free electives.

Typical choices are:

- 1510-512 History of the English Language
- 1015-525 An Ethnological Approach to Music
- 2001-552 General Social Psychology
- 2001-562 Dynamics of Human Behavior
- 2001-582 Behavior Modification
- 2202-538 Ethnopsychology
- 2207-502 , Modern Political Analysis
- 2208-560 Sociological Theory
- 2208-562 Social Change

III. Free Electives.....6 semester hours

Can be utilized as necessary for graduate course prerequisites and/or professional education courses.

IV. Additional departmental requirements:

1. Written Comprehensive Examination.
2. Demonstration of oral competence: candidate must demonstrate proficiency in handling speech in a public situation.

Minimum: 32 semester hours

Course Descriptions

0603-510 Television Production I **3 sh**

Insight and experience in the production of in-studio programs for television. Attention on commercial production, news, interviews, demonstrations, lighting and graphics. Open to majors or permission of instructor.

0603-511 Television Production II **3 sh**

Group activity in the preparation and presentation of broadcast materials including music programming, drama, interviews and educational school programming.

Prerequisite: Television Production I.

0603-580 Internship in Public Media Arts **3-7 sh**

Off campus practicum assignments: radio and television broadcasting facilities and other learning sites. Broad, balanced and locally supervised experience, by arrangement. Open to majors. Application through the department prior to registration.

0603-581 The Broadcast Media and Mass Culture **3 sh**

Influences and effects of the broadcast media on society; policy decisions and the influence of the broadcast media as conveyors of information and stimulus for change. Open to all graduate students.

0603-582 Techniques of Broadcast Communication **3 sh**

Techniques and ethics in the production of informative, entertainment, persuasive and public relations material for mass public consumption. Open to all graduate students.

0603-600 Thesis (see 1506-600)

- 1007-504 Contemporary Theater Practice** 3 sh
The status and practices in today's professional theater: writing, playing, staging and producing problems and trends of current theatrical fare. Supplemented by theatrical personnel and visits to professional producing groups in the metropolitan area. Open to all graduate students.
- 1007-507 Seminar in Dramatic Production** 3 sh
Advanced play production students pursue projects to meet individual needs in acting, directing, technical theater or other production aspects. Open to majors.
- 1007-508 Internship in Dramatic Production** 3-7 sh
Practical experience in dramatic production under supervision of staff member of professional, semi-professional, community or educational theater, on or off campus. Student assists director, designer, crew chief or technical supervisor. Contracts drawn by student, college sponsor and off-campus supervisor. Contracts drawn by student, college sponsor and off-campus supervisor. Open to majors. Application through department before registration.
- 1007-513 Modern and Contemporary Theater History** 3 sh
Theatrical history associated with Western culture from 1890 to the present; the contemporary theatrical scene and its direct heritage. Some attention to American theater but major emphasis on British and Continental developments. Open to all graduate students with a background in dramatic literature.
- 1007-514 Non-Western Drama and Theater** 3 sh
Theatrical forms and dramatic literature of non-Western cultures in historical and contemporary context: China, Japan, India, Southeast Asia, Africa. Theatrical practices in staging various dramatic forms. Open to all graduate students with a background in dramatic literature or Asian studies.
- 1007-517 Theater Criticism** 3 sh
Standards and values, both personal and historical, by which plays are judged. Student-written critiques of how theater communicates in all of its various facets. Mandatory attendance at community and professional productions. Open to all graduate students with a background in dramatic literature or theater production.
- 1007-525 Advanced Acting Workshop** 3 sh
Challenging roles, problems of style and control, as well as extensive independent study. Open to majors or permission of instructor.
- 1007-535 Advanced Directing Workshop** 3 sh
Directing repertory and period plays. Preparation for thesis production. When possible, the student will produce a full-length play and complete a production notebook. Open to majors or permission of instructor.
- 1007-545 Scenic Design I: The Legitimate Theater** 3 sh
Stage design as related to the play, director and audience; styles of design, perspective sketch and stage model in planning stage setting. Stage construction techniques used to demonstrate the necessity of scene design in planning stage production. Open to majors.
- 1007-546 Scenic Design II: The Performing Arts** 3 sh
Design problems inherent in musical comedy, opera and dance. Physical qualities of space, arena and proscenium staging and the challenges of each. Projects will involve

both lighting and scenic design. Open to graduate students with a background in the performing arts.

1007-554 Stage Lighting Design **3 sh**

Introduction to light from pragmatic and aesthetic points of view: functions and qualities as a design media; types of control and instrumentation available to designer. Development of several lighting designs. Open to majors or permission of instructor.

1007-555 Advanced Problems in Technical Production **3 sh**

Physical resources available to technician. Exploration of new materials and techniques as well as extensive work in standard techniques. Knowledge of drafting techniques helpful. Open to majors or permission of instructor.

1007-575 Seminar in Costume Design and Construction **3 sh**

Costume as one visual element of design in the theater. Research procedure, design theory, construction techniques, use of materials. Open to majors or permission of instructor.

1007-580 Theater Management **3 sh**

The theater as a business enterprise: production units; box office procedures; standard contractual arrangements; unions and their regulations; subscription management. Manager as a community relations specialist; publicity; the theater as a community resource. Open to graduate students with a background in performing arts.

1007-600 Thesis (see 1506-600)

1506-501 Survey of Research Methods **3 sh**

Research methods relating to rhetorical theory, public address, interpersonal communication, theater history, dramatic production and contemporary theatrical idiom. Historical, critical, descriptive, quantitative and experimental models and methodologies. Individual student needs and interests considered. Open to majors.

1506-503 Advanced Voice and Speech Improvement **3 sh**

To refine the voice and diction patterns of the advanced student. Techniques of evaluating and improving their own and other's in a practical setting. Open to majors or permission of instructor.

1506-504 Advanced Applied Phonetic Study **3 sh**

The phonetic approach to erasing and acquiring typical and atypical American and foreign speech sounds and patterns for stage, radio, TV and classroom. Open to majors.

1506-509 Special Problems in Speech and Theater **3 sh**

Individual problems in theater, speech and mass communication; reports, papers, panel discussion and experimentation. Open to majors or permission of instructor.

1506-511 Revolutionary Rhetoric **3 sh**

The "revolutionary" speaking of the last decade. Civil rights, university reform and war protest speakers in historical perspective. The student, as rhetorical critic, evaluating speaker and audience, will assess the ultimate effects of revolutionary speaking. Open to all graduate students.

1506-519 Seminar in Rhetorical Criticism **3 sh**

Functions, types and problems of rhetorical criticisms. Comparison of Aristotelian and non-Aristotelian approaches. Open to all graduate students.

1506-521 Competitive Forensics**3 sh**

Techniques for directing and coaching intra- and interscholastic forensic events. Discussion, debate, parliamentary congresses; speaking, reading and performing contests; local, regional and national tournament administration; scheduling, rules, publicity, housing and awards. Open to all graduate students.

1506-533 Lecture and Lecture Recital**1 sh**

Study of professional work on public platform climaxed by lecture or recital of a professional nature. Open to majors.

1506-536 Seminar in Persuasion**3 sh**

Critical examination of psychological, sociological and cultural dimensions of persuasive discourse. Open to majors or permission of instructor.

1506-560 Internship in Oral Communication**3-7 sh**

Off-campus practicum assignments range from serving on campaign speaker's or public speaker's speech staff to coaching students and/or conducting forensic tournaments. Broad, balanced and locally supervised experience, by arrangement. Open to majors. Application through the department prior to registration.

1506-565 Advanced Oral Interpretation**3 sh**

Techniques in interpretation of poetry and prose; analysis and presentation of types of literary material (short story, ballad, narrative sonnet, etc.) for use in classroom and special programs. Open to all graduate students.

1506-600 Thesis**4 sh**

Individual research or creative project selected under advisement of a faculty committee. An oral exam follows the project; student should register for the semester in which work will be completed. Open to majors.

Written permission for registration from the graduate advisor is required.



STUDENT PERSONNEL SERVICES

Chairman and Graduate Advisor: Dr. Richard Grey

Counseling and personnel services have become an integral part of the American scene. Schools and colleges, community agencies and industry, and State and Federal governments have all developed services to aid students, workers and others to adjust to a changing society. Montclair State College has been a leader in the state in preparation of counselors to staff these efforts, in developing programs to identify new areas of counseling service, and in providing new approaches to the training of counselors.

Utilizing the resources identified through outreach programs, the department provides courses to train counselors to work with inner-city youth, Black and Puerto Rican communities, Veterans, prisoners and re-entry adult learners. Building blocks of courses around the unique needs of specialized groups, the department offers programs for Spanish-speaking counselors, a complete degree program in Ocean County for residents of that area, and other programs tailored to specific needs.

A major sub-specialty offers selected students the opportunity to complete a program in Human Organizational Processes. H.O.P. prepares students for leadership roles in a variety of areas in which personal awareness, skills in leading groups, and facilitation of communication within and among groups are required.

Completion of the Master of Arts program usually provides basic certification as a School Guidance Counselor.

Students may also complete the certification for School Social Workers as part of the Student Personnel Department offerings.

Admission Requirements

All students must meet the admission requirements for graduate study at Montclair State College. In addition, they must be interviewed and accepted for matriculation by the Student Personnel Services Faculty.

Requirements for the Master of Arts Degree in Student Personnel Services

I. Courses

Core Areas..... (12 Semester hours required)

Guidance & Counseling Concentration: 0826-580, 582, 585*, and 588
*0842-564 may be substituted

H.O.P. Concentration: 0842-564, 568

School Social Work Concentration: 0826-560, 562, 588, 0842-564*
*0826-585 may be substituted

Testing and Evaluation..... (3 Semester hours required)

Guidance & Counseling Concentration: 0824-578

School Social Worker Concentration: 0824-578 or 0826-579

H.O.P. — no requirement

Psychological Foundations..... (6 Semester hours required)

To be selected from Psychology Department offerings with approval of Student Personnel Services Department Advisor.

Sociological/Economic Foundations	(6 Semester hours required)
Guidance and Counseling Concentration:	0826-581 and 3 s.h. Elect.
School Social Work Concentration:	0826-581 and 3 s.h. Elect.
H.O.P. Concentration:	3 s.h. elective <i>only</i>
Research.....	(3 Semester hours required)
All concentrations:	0824-503
Fieldwork.....	(3 Semester hours required)
	0826-654, 655, or 656 —
	Depending on Concentration

In addition, all students will complete elective courses to bring graduate total to 39 Semester hours.

II. Comprehensive Examination

Note: Fieldwork/Practicum in each concentration consists of a field placement in a school guidance office or in a suitable alternative placement approved by the Fieldwork/Practicum instructor. The Fieldwork comprises a minimum of 150 hours of observation and contact with clients at the site. Periodic practica are held during the term in which student is enrolled for the course to aid in coordination of the experience and its integration with the total curriculum.

Requirements for Certification

In addition to completing the program of studies, persons wishing N.J. State Certification in Guidance must have a bona-fide teaching certificate and one year of teaching experience *under certification*.

The State Department of Education is currently revising the requirements for certification in guidance. Students are encouraged to consult the certification advisor in the Graduate Office regarding the new requirements.

Those wishing to be certified as school social workers must have a minimum of three years teaching experience or three years of experience in social work under approved supervision.

No specific certification is associated with the H.O.P. Concentration but many students in this area are able to complete requirements for either the guidance or school social work certificate.

Course Descriptions

0826-560 Medical Problems in Education **3 sh**
 Role of the educator in relation to the following subject areas: childhood chronic and contagious diseases; nutritional problems; narcotics and psycho-socio-medical pathologies. Impact of health problems on the family, school and community.

0826-562 Social Case Work I **3 sh**
 Principles in social case work as they relate to the school setting. Theoretical development of social work norms and the function and role of the school social worker (visiting teacher). Cases developed by social workers will be studied and school experiences provided.

0826-565 The Role of the School Social Worker**3 sh**

Historical development as found in the literature; an examination of the contemporary scene as social work relates to other emphasis in the helping professions and some original investigations in the area of role theory, utilizing the "Role Analysis Paradigm."

0826-570 Counseling Adults**3 sh**

Techniques; identification of problem areas common to students of college age, to parents and out-of-school adults. Case studies with ample opportunity for the student to engage in supervised practice.

Prerequisite: Principles of Guidance and Counseling 0826-580.

0826-579 The Use of Tests in Counseling**3 sh**

Using test results; interpreting test results to teachers, administrators, parents and students. Statistical analysis for research and program development. Laboratory techniques in administering, scoring and interpreting tests. Planning of the testing program for the elementary and secondary school.

Prerequisite: Testing and Evaluation 0824-578 or equivalent, or permission of instructor.

0826-580 Principles of Guidance and Counseling**3 sh**

Philosophy of guidance, history of the guidance movement, need for guidance presented by children and adolescents. Methods of gathering useful data, school records, exploratory activities, tests, inventories, the case study approach, occupational information and occupational data and general methods of guidance with special stress on interviewing and counseling of students.

0826-581 Community Resources for Guidance**3 sh**

Various agencies, industries and institutions available in the surrounding communities for use in guiding students. Location and nature of these facilities and techniques for arranging student interviews and visits. Class discussion and personal research supplemented by field trips.

Prerequisite: Principles of Guidance and Counseling 0826-580 — may be taken concurrently.

0826-582 Vocational Guidance and Occupational Information**2 sh**

Principles of vocational education. Counseling high school youth who want pre-employment training; counseling out-of-school groups who are adjusting to occupational life. Guidance techniques for job preparation and readjustment; matching educational and personal abilities to job specifications; the effects of social legislation on the employment of youths; determining occupational needs and changes.

Prerequisite: Principles of Guidance and Counseling 0826-580 — may be taken concurrently.

0826-583 Educational Guidance**3 sh**

Facilities for education after high school graduation, further training for dropouts and the academic problems of students while in school. Brief survey of colleges and college admission procedures.

Prerequisite: Principles of Guidance and Counseling 0826-580.

0826-585 Group Guidance and Counseling Activities**3 sh**

Techniques for helping individual pupils and for using group activities, including role-playing. Group activities include home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college night and career days.

Prerequisite: Principles of Guidance and Counseling 0826-580 — may be taken concurrently.

0826-586 Elementary School Guidance Services 3 sh

Guidance services that may be offered in grades kindergarten through six. Established in the public schools, the guidance program envisions supervision through graduation at grade twelve.

Prerequisite: Principles of Guidance and Counseling 0826-580.

0826-587 Administration and Supervision of Guidance Programs 3 sh

Developing and administering programs of student registration, theory and techniques of scheduling, and supervisory responsibilities of the director of guidance. Coordinating guidance activities in a multi-school district. Examination of current guidance practices; formation of proposals for improvement in programs where the student is working as a counselor and/or director.

Prerequisite: Principles of Guidance and Counseling 0826-580 and 6 semester hours.

0826-588 Techniques of Interviewing and Counseling 2 sh

Directive, non-directive, client-centered and role-playing approaches to individual students, as well as the case study method. Demonstration and practice with these techniques implemented with tape recordings, one way screens and closed circuit television.

Prerequisite: Principles of Guidance and Counseling 0826-580.

0826-589 Student Personnel Services in Higher Education 3 sh

Personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

Prerequisite: Principles of Guidance and Counseling 0826-580 .

0826-650 Research Seminar and Thesis Writing 3 sh

During the time the student is preparing the research document he/she should enroll in 0826-650, Thesis Supervision. This entitles him/her to faculty advisement and conferences. He/she is required to re-enroll in 0826-650 each semester (without credit) until the document is completed.

Prerequisite: Approval of advisor.

0826-654 Field Work and Practicum in Guidance and Counseling 3 sh

Experience in agencies actually dealing with guidance problems. Observe and participate in activities of the assigned agency and write full accounts of observations and experiences. Some time is spent in discussing and evaluating experiences and relating them to the literature of the subject.

Prerequisite: Principles of Guidance and Counseling 0826-580.

0826-655 Field Work and Practicum in Social Work 3 sh

Diagnostic skills, interviewing techniques, case recording, individual and group therapy and team approach. Under guidance of a certified, experienced school social worker, the student will develop an understanding of the use of community resources. Observe special services (school social worker, psychologist, psychiatrist, speech or reading specialist and teacher) in action as a therapeutic plan is developed for the school pupil.

Prerequisite: Principles of Guidance and Counseling 0826-580 and 12 semester hours in the Personnel Services Program.

0826-670 Techniques of Evaluation**3 sh**

Provides a background in the design, use and interpretation of statistical evidence.

Prerequisite: Approval of advisor.

0826-680 The Student Personnel Services Team**3 sh**

Establishing the philosophy, membership, roles and functions of the various services that compose the Personnel Services team.

Prerequisite: Approval of advisor.

Human Organizational Processes

0842-564 Dynamics of Group Process**3 sh**

A laboratory-based course for the development of group skills and understandings. Focus on experimental learning and personal growth. Readings in human inter-action theory related to actual group participation. The function of groups within large organizations.

0842-565 Consultation in Organizational Development**3 sh**

A laboratory-based course which focuses on the role of the organizational consultant; planning, providing help and evaluating activities; diagnostic and behavioral skills. For those considering consultation work in business, industry, government, penology, education and community organizations.

Prerequisite: 0842-564 or permission of the instructor.

0842-566 Field Work in Group Leadership**3 sh**

On-the-job training for group workers to sharpen diagnostic and behavioral skills. Students join an on-going task-centered group as member or leader, and make a problem diagnosis, a procedural plan and a method of evaluation. In-progress and final reports will be discussed.

0842-567 Research Seminar in Group Processes**3 sh**

Students develop, carry out and evaluate a research project in small processes. They work singly or in groups to investigate the application of group work to their major fields of interest.

Prerequisite: 0842-564.

0842-568 Theoretical Constructs in Social Group Interaction**3 sh**

Problems and current practices in small group interaction, social restructuring and cultural encounter. Survey of literature on the influence of interaction on small group behaviors, learning theories, leadership, decision making, social reconstruction, value conflict and perception of self and others.

0842-569 Techniques and Exercises in Group Dynamics**3 sh**

A structured experiential course: participating in and evaluating activities and exercises of individuals who work with small groups. Students will modify old designs and create new ones as they compile their own ideas, forms and exercises.

Prerequisite: 0842-564 or equivalent and approval of the instructor.

0842-661 Group Development Laboratory I**3 sh****0842-662 Group Development Laboratory II****3 sh**

Seminar experience as a core for advanced study in organizational leadership. Group participation and periodic opportunities to examine the problems of a group and the

effects of individual behaviors in group development. Methods of applying this experience to the improvement of communication in client organizations.
Prerequisite: 0842-564 and approval of the instructor.

The following 400 level Senior-Graduate courses are available as electives with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
0842-430 Interaction Analysis	3
0842-431 Individual and Group Dynamics	3

NON-DEGREE POST-BACCALAUREATE/POST M.A. APPROVED CERTIFICATION PROGRAMS

Chairman: Dr. Nicholas Michelli

Certification Advisor: Ms. Simone C. Picard

Counselor: Ms. Marcella P. West

I. Teacher Certification

This program enables a student with a baccalaureate degree to obtain a N.J. teaching certificate. Students planning to enter the teacher certification program must follow prescribed admission procedures. Admission to the College cannot be considered admission to the teacher certification program. Criteria for admission to the program are as follows:

1. Three favorable recommendations from individuals aware of applicants' scholastic aptitude and character.
2. Demonstration of competence in speech.
3. Cumulative average of at least 2.45 on a 4.00 scale.
4. Evidence of active interest in community affairs and teaching.
5. Acceptance by a faculty admissions committee.

The program is open to students with undergraduate background equivalent to a teaching field in one of these areas: fine arts, business education (bookkeeping and accounting, general business education, distributive education, secretarial studies), English, foreign languages (French, German, Latin, Spanish), home economics, industrial education and technology, mathematics, music, nursery school education, health and/or physical education, science, social sciences, speech and theater. (See also teaching areas listed in next page.)

Upon successful completion of the program, the student will be recommended to the N.J. Department of Education for a teaching certificate (i.e. initial teaching field, Learning Disabilities Teacher Consultant, or School Psychologist). Students interested in teaching outside of New Jersey should seek information from the appropriate state authorities. In general, however, requirements are similar.

Advisement

All general questions regarding certification, requests for specific information concerning procedure and courses applicable toward approved initial teacher certification programs available at Montclair State College, may be directed to one of the following: Ms. Marcella P. West, 893-4139 in the School of Education and Community Services,

or

Ms. Simone C. Picard, 893-5147/8 in the Graduate Division.

Persons interested in the program may secure information from program advisors. Upon acceptance, a student will be assigned a School of Education advisor who will cooperatively develop a formal program of studies with a departmental (teaching field) advisor. Continuous advisement is available to students. For information about certification in New Jersey, the student may confer with the advisor for certification programs.

Teacher Certification Program Requirements

General Education

Academic background requires a minimum of forty-five semester hour credits in general education including study in at least four of the following areas: English, mathematics, science, social science, fine and practical arts, foreign languages, music and philosophy.

Professional Education

A.	PREQUISITES	semester hours
	2001-101 General Psych. I — Human Growth & Développement.....	3
	0829-410 Field Experience in Education	1-3
	Speech Proficiency Requirements)	
	Physiology/Hygiene Requirements)	Details provided by Education Advisor
B.	PROFESSIONAL SEQUENCE	semester hours
	Major Departmental Methods.....	3
	0829-400 Teacher, School & Society	3
	2001-200 Educational Psychology	3
	0821-420 Philosophical Foundations of Education	3
	Education Elective (pending advisement)	3
	0829-411 Supervised Student Teaching or)	8
	0829-414-5 In-Service Supervised Teaching)	
	Co-requisite with all Student Teaching Experiences:	
	0829-401 Senior Field Experience and.....	1
	0829-402 Seminar in Professional Education	1
C.	TEACHING FIELD (PENDING DEPARTMENTAL ADVISEMENT)	

Note:

- 1) The Field Experience in Education must be completed the semester prior to the semester in which Student Teaching is desired.
- 2) All applicants filing for admission to non-degree certification and/or M.A.T. programs on or after November 1, 1975 must fulfill the course requirement in the HUMAN & INTERCULTURAL RELATIONS area as part of the approved programs for initial teacher certification.
- 3) All students completing certification programs (i.e., initial teaching field) after September 1977 must successfully complete two courses dealing with the teaching of reading (i.e. 0808-407 and 408). See pages 58, 61.

Teacher Certification Areas

- A. Business Education: General Business Studies and Accounting, General Business and Secretarial Studies, General Business and Distributive Education
- B. Communication Sciences and Disorders: Speech Correction, Deaf and Hard of Hearing, Teacher of the Handicapped.
- C. English
- D. Fine Arts
- E. Foreign Languages (French, German, Latin, Spanish)
- F. Health and/or Physical Education

- G. Industrial Education and Technology: Industrial Education and Technology (academic background), Industrial Education and Technology (experience background), Vocational/Technical Education (undergraduate only, B.A. not required)
- H. Mathematics
- I. Music
- J. Nursery School Education-preschool/kindergarten
- K. Science (biology, chemistry, geoscience, physics)
- L. Social Studies
- M. Speech and Theater

II. Advanced Certification (Post-Masters)

State certification is available in the following non-teaching educational specializations:

- A. Administration and Supervision: Supervisor, Principal, Superintendent
- B. Learning Disabilities Teacher Consultant
- C. Student Personnel Services
- D. Educational Media Specialist

III. Other Fields/Endorsements

Professional or State certification is available in the following areas:

- A. Coordinator Industrial Education (for further information see p. 98)
- B. Music Therapy
- C. Reading (for further information see p. 58)
- D. School Business Administrator
- E. School Psychologist (for further information see p. 127)
- F. School Social Worker
- G. Teacher-Librarian/Associate Media Specialist

Supervised Student Teaching

Students who have been admitted to Teacher Education and who are eligible for Student Teaching must file application the semester prior to semester in which Student Teaching is desired. Application procedures must be completed by:

September 15 for Student Teaching in the Spring Semester

March 15 for Student Teaching in the Fall Semester

All appropriate department and professional education courses must be completed prior to filing application for Student Teaching. This normally would include 9-12 semester hours at Montclair State College including Methods in teaching field.

(Note: There is a combined Teacher Certification and Master of Arts in Teaching (MAT) Program available; information may be obtained by contacting the Graduate Division 892-5147 or School of Education and Community Services 893-4139).

Educational Placement

The Office of Student Teaching also offers an educational placement service. Students completing at least 12 credits at Montclair State College are eligible to register for this service. Further information can be secured from Dr. Norman Lange, Director of Student Teaching and Educational Placement, and Mrs. Beverly McHugh, Associate Director, 893-4262.

Methods of Applying for Certification

The Registrar is the only College certifying agent. For detailed information about final evaluation procedures and methods of applying for certification, see General Information section of current Schedule of Courses book.

POST MASTER TECHNICAL OFFERINGS

I. Scope and Purpose

To provide professional and technical offerings beyond the masters degree level for graduate students desiring further technical competencies in their chosen fields of expertise.

II. Prerequisite

A masters degree in Industrial Education and Technology or in an equivalent field.

III. Technical Offerings

Courses for this offering are in the process of development. Please check the current semester schedule book for the new offerings.

Doctoral Program in Educational Administration With A Major Emphasis in Community Education

A cooperative program exists among Montclair State College, Worcester State College, the University of Vermont and the University of Connecticut for students who wish to pursue a Doctor of Philosophy degree in educational administration with a major emphasis in community education.

This consortium arrangement permits the taking of course work at the sending institutions which can then be transferred to the granting institution, the University of Connecticut.

At present, under ordinary conditions, the student should anticipate pursuing approximately 18 semester hours at the University of Connecticut plus completion of comprehensive examinations in three major areas, one year residence and a doctoral dissertation.

In each instance, the sending institution will do the initial screening and recommend candidates to the University of Connecticut for further consideration.

Candidates who are interested in exploring this degree program can receive further information and details about procedures from the Office of the Dean, School of Educational and Community Services, Montclair State College, Upper Montclair, New Jersey 07043.

GRADUATE FACULTY

School of Education

TIMOTHY J. ABRAHAM

Education

Ed.D., Columbia University

JOHN BARELL

Education

Ed.D., Columbia University

CATHERINE BECKER

Education

Ph.D., New York University

LAURENCE BELLAGAMBA

Education

Ed.D., Columbia University

GEORGE BERNSTEIN

Education

Ph.D., Columbia University

SUSIE BOYCE

Education

Ed.D., Rutgers University

MARY E. BREDEMEIER

Education

Ed.D., Rutgers University

JOSEPH F. BRUNNER

Education

Ed.D., University of Massachusetts

FRANCESCO CORDASCO

Education

Ed.D., New York University

WILLIAM A. CUFF

Education

M.A., George Washington University

RAYMOND A. DISPOTO

Education

Ed.D., Rutgers University

J. THOMAS FLAGG

Education

Ed.D., Rutgers University

JOAN G. GAENG

Education

M.A., Montclair State College

ABRAHAM GELFOND

Education

Ph.D., University of Michigan

ALFRED GORMAN

Education

Ed.D., Columbia University

DONALD B. GREGG

Education

Ed.D., Lehigh University

RICHARD GREY

Education

Ed.D., Fordham University

THUNDER HAAS

Education

Ed.D., Rutgers University

LAWRENCE B. HAMEL

Education

Ed.D., St. John's University

GEORGE D. HEISS

Education

Ed.D., Rutgers University

LAWRENCE B. KENYON

Education

Ed.D., University of Colorado

GEORGE KING

Education

Ed.D., Rutgers University

DANIEL KUNZ

Education

Ed.D., Rutgers University

GERHARD LANG

Education

Ph.D., Columbia University

NORMAN LANGE

Education

Ed.D., Columbia University

FRANK P. MERLO

Education

Ed.D., Rutgers University

NICHOLAS MICHELLI

Education
Ed.D., Columbia University

THOMAS L. MILLARD

Education
Ed.D., Fairleigh Dickinson University

EDWIN MILLS

Education
M.A., Florida-Atlantic University

WENDY OXMAN

Education
Ph.D., Fordham University

ROBERT A. PINES

Education
Ed.D., University of Miami

GROSVENOR RUST

Education
Ph.D., University of Chicago

MARIA SCHANTZ

Education
Ed.D., Columbia University

ANN M. SHARP

Education
Ed.D., University of Massachusetts

JEAN TALLEY

Education
Ph.D., Boston University

TETE H. TETENS

Education
M.A., Columbia University

ANITA UHIA

Education
M.A., Montclair State College

ARLENE UNGER

Education
M.A., Montclair State College

JOSEPH E. VENTURINI

Education
Ed.D., Rutgers University

ERCELL I. WATSON

Education
Ed.D., University of Pennsylvania
LL.D., Delaware State College

ROBERT B. WILLIAMS

Education
Ed.D., Rutgers University

DAVID WEISCHDALE

Education
Ed.D., Rutgers University

School of Fine and Performing Arts

PETER BARNET

Fine Arts
Ed.D., New York University

SUSAN E. BARRIS

Fine Arts
M.A., Pratt Institute

MARDEN BATE

Voice
M.A., Columbia University

JOSEPH BELLA

Costume Design
M.F.A., Catholic University of America

WAYNE BOND

Speech
Ph.D., Southern Illinois University

DONALD BUTTERFIELD

Tuba
Diploma, Juilliard School of Music

MAUREEN CARR

Music Theory
Ph.D., University of Wisconsin-Madison

ANNE CHAPMAN

Fine Arts
M.F.A., Cranbrook Academy of Art

CARMEN CICERO

Exhibiting Artist
B.A., Newark State College

BRENDA MILLER COOPER

Voice

M.A., Columbia University

JOHN CZERKOWICZ

Fine Arts

M.F.A., Rutgers University

LEON DeLEEUW

Fine Arts

M.A., New York University

L. HOWARD FOX

Speech and Theater

Ph.D., New York University

JOHN GIRT

Music Theory

M.F.A., Carnegie Institute of Technology

SUELLEN GLASSHAUSER

Fine Arts

M.F.A., University of California

HOWARD GREENBLATT

Guitar

M.A., Hofstra University

RUSSELL HAYTON

Organ

M.Mus., Union Theological Seminary

TING HO

Theory/Composition

Ph.D., Eastman School of Music

LEON HYMAN

Viola; Conducting

M.S., Juilliard School of Music

AVRAM KAMPF

Fine Arts

Ph.D., New School of Social Research

RICHARD KYLE

Fine Arts

M.A., Columbia University

JEROME LANDSMAN

Violin

D.M.A., University of Southern California

PATRICIA LAY

Ceramics/Sculpture

M.F.A., Rochester Institute of Technology

W. SCOTT MacCONNELL

Design/Technical Theater

M.A., Columbia University

CHARLES H. MARTENS

Fine Arts

Ed.D., New York University

WILLIAM C. McCREATH

Fine Arts

M.F.A., Cranbrook Academy of Art

DENNIS McDONALD

Theater

Ph.D., Carnegie-Mellon University

CLYDE W. McELROY

Theater

Ed.D., University of Virginia

DONALD MINTZ

Musicology

Ph.D., Cornell University

JILL O'CONNELL

Fine Arts

M.F.A., Pratt Institute

MARIO F. ONEGLIA

Trumpet; Music Education

Ed.D., Columbia University

ROSALIE R. PRATT

Harp; Music Education

Ed.D., Columbia University

MURRAY PRESENT

Piano

B.Mus., Michigan State University

DAVID RANDOLPH

Conducting; Music Literature

M.A., Columbia University

HERBERT RANKIN

Trombone

OSCAR RAVINA

Violin; Viola

Diploma, Leningrad Conservatory

RUTH RENDLEMAN

Piano; Theory

M.M., Manhattan School of Music

JEROME ROCKWOOD

Theater
Ph.D., New York University

EVELYN ROSENBERG

Fine Arts
M.A., University of New Mexico

HELENE S. ROSS

Fine Arts
M.F.A., Temple University

PHILIP J. SABATELLI

Communication Theory
Ph.D., Temple University

JACK SACHER

Music History/Opera
Ed.D., Columbia University

PAMELA SCHEINMAN

Fine Arts
M.F.A., Indiana University

KLAUS A. SCHNITZER

Fine Arts
M.F.A., Ohio University

GERARD SCHWARZ

Trumpet; Conducting

ANN G. SEIDLER

Speech
Ph.D., New York University

WILLIAM SHADEL

Clarinet; Conducting
M.Mus., Manhattan School of Music

JONATHAN SILVER

Art History
M.A., Columbia University

MICHAEL SIPORIN

Fine Arts
M.F.A., Southern Illinois University

DONALD SOBOLIK

Speech and Theater
M.A., University of Nebraska

CHRISTOPHER STASHEFF

Broadcasting
Ph.D., University of Nebraska

HOWARD TRAVIS

Broadcasting
M.A., University of Michigan

RALPH A. VERNACCHIA

Fine Arts
M.A., M.F.A., Columbia University

EMILY WATERS

Music Education
M.A., Montclair State College

BRIAN B. WATKINS

Fine Arts
M.F.A., Rutgers University

CAROL WESTFALL

Fine Arts
M.F.A., Maryland Institute

BENJAMIN F. WILKES

Voice
Ed.D., Columbia University

THOMAS WILT

Flute; Ethnomusicology
M. Music., University

PHILIP WINTER

Fine Arts
M.A., City University of New York

CHAIM ZEMACH

Violoncello
Diplomate of the Accademia Chigiana

GRADUATE FACULTY

School of Humanities

M. VICTOR ALPER

English

Ph.D., New York University

KENNETH AMAN

Philosophy and Religion

Ph.D., Yale University

THOMAS BENEDIKTSSON

English

Ph.D., University of Washington

DAVID BENFIELD

Philosophy and Religion

Ph.D., Brown University

VINCENZO BOLLETTINO

Spanish and Italian

Ph.D., Rutgers University

GEORGE BRANTL

Philosophy and Religion

Ph.D., Columbia University

THOMAS BRIDGES

Philosophy and Religion

Ph.D., Columbia University

MAURICE CAGNON

French

Ph.D., University of Pennsylvania

DAVID W.D. DICKSON

English

Ph.D., Harvard University

MARGARET DUGGAN

English

Ph.D., Columbia University

JOANNE ENGELBERT

Spanish

Ph.D., New York University

WOLFGANG B. FLEISCHMANN

English

Ph.D., University of North Carolina

EVA M. FLEISCHNER

Philosophy and Religion

Ph.D., Marquette University

NORMAN FULTON

Spanish and Italian

Ph.D., University of Madrid

ROBERT GLICK

French

Ph.D., University of Chicago

FRANK HANSON

English

Ph.D., Yale University

E. CLAIRE HEALEY

English

Ph.D., Columbia University

WALTER HEILBRONNER

German

Ph.D., University of Michigan

JOHN E. HWANG

Spanish and Italian

Ph.D., University of Oregon

BARRY JACOBS

English

Ph.D., Harvard University

RITA JACOBS

English

Ph.D., University of Pennsylvania

STEPHEN JOHNSON

Philosophy and Religion

Ph.D., Yale University

DAVID KELLY

Classics

Ph.D., University of Pennsylvania

LEE KHANNA

English

Ph.D., Columbia University

HELENE KLIBBE

French

Ph.D., Syracuse University

LINDA LEVINE

Spanish and Italian

Ph.D., Harvard University

C. DANIEL LINDBLOM

German

Ph.D., Rutgers University

MATTHEW LIPMAN

Philosophy and Religion

Ph.D., Columbia University

ADELE McCOLLUM

Religion

Ph.D., Syracuse University

MORRIS McGEE

English

Ed.D., New York University

DAVID MERANZE

English

D.F.A., Yale University

ANNE MICKELSON

English

Ph.D., Rutgers University

ALYCE MILLER

English

Ph.D., Pennsylvania State University

ROBERT MILLER

Linguistics

Ph.D., University of Michigan

JOHN V. MOORE

German

Ph.D., Princeton University

JAMES NASH

English

Ph.D., University of Virginia

J. RAYMOND PAUL

English

M.A., Columbia University

JAMES PETTEGROVE

English

M.A., Harvard University

GEORGE PETTY

English

Ph.D., New York University

PAOLO POSSIEDI

Spanish and Italian

Ph.D., University of Padua

THEODORE PRICE

English

Ph.D., Rutgers University

MURRAY PROSKY

English

Ph.D., University of Wisconsin

SANFORD RADNER

English

Ed.D., Columbia University

ANA RAMBALDO

Spanish and Italian

Ph.D., New York University

MORTON D. RICH

English

Ph.D., New York University

THOMAS H. RICHARDSON

Education and Philosophy

Ed.D., Columbia University

LOUIS ROEDERER

French

Ph.D., New York University

ERNESTINE SCHLANT

German

Ph.D., Emory University

DOUGLAS SCHWEGEL

English

Ph.D., University of Minnesota

MILTON S. SEEGMILLER

Linguistics

Ph.D., New York University

MADELEINE SERGENT

French

M.A., University of Colorado

KEITH SLOCUM

English

Ph.D., University of Pennsylvania

SHARON SPENCER

English

Ph.D., New York University

ENID STANDRING

French

Ph.D., New York University

WILLIAM L. STANTON
Philosophy
Ph.D., Princeton University

ROBERT F. STREETMAN
Religion
Ph.D., Drew University

DAVID STUEHLER
English
Ph.D., New York University

LILLIAN SZKLARCZYK
French
Ph.D., University of Pennsylvania

KATHLEEN WILKINS
French
Ph.D., University of Southampton

JOHN ZAHNER
Spanish
Ph.D., University of Arizona

School of Mathematics and Science

HARDIP S. AHLUWALIA
Mathematics
Ph.D., Indiana University

JOSEPH F. BECKER
Chemistry
Ed.D., Columbia University

STANLEY H. BENTON, JR.
Mathematics
Ph.D., Tulane University

EDWARD BOYNO
Mathematics
Ph.D., Rutgers University

CARL E. BREDLAU
Mathematics
Ph.D., Rutgers University

WINCHUNG A. CHAI
Mathematics
Ph.D., Polytechnic Institute of Brooklyn

LARRY D. CRIBBEN
Biology
Ph.D., Ohio University

GERT L. DANIELS
Biology
Ed.D., Columbia University

ANDREW DEMETROPOULOS
Mathematics
Ph.D., Stevens Institute of Technology

ANN MARIE DiLORENZO
Biology
Ph.D., New York University

THOMAS DEVLIN
Mathematics
Ph.D., Catholic University of America

ANDREW GALLOPO
Chemistry
Ph.D., Brown University

ROBERT GARFUNKEL
Mathematics
M.A., Montclair State College

VLADIMIR GARIK
Chemistry
Ph.D., University of Connecticut

IRWIN H. GAWLEY
Chemistry
Ed.D., Columbia University

OPHELIA GONA
Biology
Ph.D., City University of New York

CHARLES L. HAMILTON
Geoscience
Ph.D., Virginia Polytechnic Institute

SAMUEL HEFT
Mathematics
Ph.D., University of North Carolina

JOHN L. ISIDOR
Chemistry
Ph.D., University of North Carolina
Chapel Hill

KENNETH KALMANSON
Mathematics
Ph.D., City University of New York

- ROSALYN KANE
Biology
M.S., New York University
- MARC L. KASNER
Chemistry
Ph.D., Purdue University
- PATRICIA C. KENSCHAF
Mathematics
Ph.D., University of Pennsylvania
- LEAH KODITSCHKE
Biology
Ph.D., Rutgers University
- STEPHEN J. KOEPP
Biology
Ph.D., Northern Texas State University
- LUDWIK KOWALSKI
Geoscience
Ph.D., L'Universite de Paris
- S. MARIE KUHNEN
Biology
Ph.D., New York University
- AUDREY J. LEEF
Mathematics
Ed.D., Rutgers University
- RICHARD A. LYNDE
Chemistry
Ph.D., Iowa State University
- MARK L. LYNDROP
Chemistry
Ph.D., Northwestern University
- EVAN MALETSKY
Mathematics
Ph.D., New York University
- HELEN MARCUS-ROBERTS
Mathematics
Ph.D., Johns Hopkins University
- J. MICHAEL McCORMICK
Biology
Ph.D., Oregon State University
- ANNA PAI
Biology
Ph.D., Yeshiva University
- NANCY PAISLEY
Chemistry
Ph.D., University of Illinois
- WILLIAM PARZYNSKI
Mathematics
Ph.D., Stevens Institute of Technology
- ROBERT C. RAMSDELL
Geoscience
M.S., Rutgers University
M.A., Princeton University
- LAWRENCE RUSSELL
Mathematics
Ph.D., Stevens Institute of Technology
- MARIE SAWITS
Biology
Ph.D., Columbia University
- JUDITH SHILLCOCK
Biology
Ph.D., Rutgers University
- PAUL SHUBECK
Biology
Ph.D., Rutgers University
- MAX SOBEL
Mathematics
Ph.D., Columbia University
- JOHN G. STEVENS
Mathematics
Ph.D., New York University
- RUTH STEWART
Mathematics
Ed.D., Rutgers University
- JAMES H. STODDARD
Mathematics
Ph.D., University of Michigan
- MICHAEL SURGAN
Biology
Ph.D., University of Massachusetts
- JOHN V. THIRUVATHUKAL
Geoscience
Ph.D., Oregon State University
- THOMAS E. WILLIAMSON, JR.
Mathematics
Ph.D., Rutgers University
- PHILIP W. ZIPSE
Mathematics
Ph.D., Rutgers University

School of Professional Arts and Sciences

MOSHE BEN HORIM

Administrative Sciences
Ph.D., New York University

RUTH C. BLANCHE

Health Professions
Ed.D., Teachers College, Columbia University

RUTH E. CAROL

Home Economics
Ed.D., Teachers College, Columbia University

CHUAN-YU-CHEN

Administrative Sciences
Ph.D., New York University

ALDEN C. CODER

Physical Education
Ed.D., Boston University

MICHAEL S. DAVIDSON

Health Professions
Ed.D., Teachers College, Columbia University

RALPH A. DIPIETRO

Administrative Sciences
Ph.D., New York University

MICHAEL E. DYRENFURTH

Industrial Education & Technology
Ph.D., Bowling Green State University

ARTHUR W. EARL

Industrial Education & Technology
Ed.D., Columbia University

HOUSTON G. ELAM

Administrative Sciences
Ph.D., New York University

M. ELAINE FLINT

Home Economics
Ph.D., Pennsylvania State University

RALPH GALLAY

Administrative Sciences
Ph.D., New York University

DAVID K. GRAF

Business & Distributive Education
Ph.D., University of North Dakota

JOSEPH A. GRECO

Administrative Sciences
Ph.D., New York University

MARTIN L. GREENWALD

Industrial Education & Technology
Ed.D., New York University

KATHARINE B. HALL

Home Economics
Ph.D., Pennsylvania State University

JOSEPH C. HECHT

Business & Distributive Education
Ed.D., New York University

HARRY H. HOITSMA

Health Professions
Ed.D., New York University

GEORGE A. HORN

Physical Education
Ed.D., New York University

FREDERICK J. KELLY

Administrative Sciences
Ph.D., Columbia University

JOHN J. KIRK

School of Conservation
Ph.D., University of Michigan

LEONARD B. KRUK

Business & Distributive Education
Ed.D., Temple University

LEONARD LUCENKO

Physical Education
Ph.D., University of Utah

ROBERT E. MEYERS, JR.

Recreation Professions
Doctor of Criminology
University of California

BYUNG K. MIN

Administrative Sciences
Ph.D., Pennsylvania State University

VIVIAN D. MORRIS

Home Economics
Ph.D., Peabody College

LOUIS C. NANASSY

Business & Distributive Education
Ed.D., Columbia University

WAYNE NELSON

Industrial Education & Technology
Ed.D., University of Northern Colorado

- GEORGE OLSEN
Industrial Education & Technology
Ed.D., New York University
- ALAN J. OPPENHEIM
Administrative Sciences
Ph.D., New York University
- CATHERINE J. PASKERT
Health Professions
Ph.D., University of Utah
- GEORGE B. PEARSON
Physical Education
Ed.D., University of Oregon
- JOHN G. REDD
Health Professions
Ph.D., University of Michigan
- GLEN REHORN
Industrial Education & Technology
Ed.D., Oklahoma State University
- BLANCHE R. REID
Health Professions
Ph.D., New York University
- W. AUGUSTUS RENTSCH
Health Professions
Ph.D., University of Michigan
- ALBERT D. ROSSETTI
Business & Distributive Education
Ed.D., Rutgers University
- DORIS H. RUSLINK
Home Economics
Ph.D., New York University
- ANDRE J. SAN AUGUSTINE
Administrative Sciences
Ph.D., Pennsylvania State University
- JOAN SCHLEEDE
Physical Education
Ed.D., New York University
- FRED C. SCHUMM
Industrial Education & Technology
Ph.D., New York University
- REZA SHAHROKH
Health Professions
Ph.D., Southern Illinois University
- ROGER W. SIMMONS
Physical Education
Ph.D., University of Iowa
- VENKATARAMAN SRIKANTH
Administrative Sciences
Ph.D., Columbia University
- VIVJAY TANEJA
Home Economics
Ph.D., Iowa State University
- RICHARD W. TEWS
Physical Education
Ph.D., New York University
- KAREN R. TODD
Home Economics
Ph.D., State University of Iowa
- JOSEPH TOTH
Physical Education
Ed.D., Colorado State University
- JOHN H. TURNER
Administrative Sciences
Ph.D., City University of New York
- RAYMOND VAN BENSCHOTEN
Vocational-Technical Education
Ed.D., Rutgers University
- ALEXANDER VOLOTTA
Administrative Sciences
Ph.D., Pennsylvania State University
- HAZEL M. WACKER
Physical Education
Ed.D., New York University
- VINCENT J. WALENCIK
Industrial Education & Technology
Ed.D., Rutgers University
- ELMER E. WATERS
Administrative Sciences
Ph.D., City University of New York

School of Social and Behavioral Sciences

DAVID N. ALLOWAY

Sociology

Ph.D., New York University

EDWARD ARONOW

Psychology

Ph.D., Fordham University

JOSEPH ATTANASIO

Communication Sciences & Disorders

M.A., Montclair State College

IRWIN BADIN

Psychology

Ph.D., New York University

HARRY BALFE, II

Political Science

J.D., Catholic University

M.A., American University

ELAINE BARDEN

Communication Sciences & Disorders

Ph.D., Columbia University

RICHARD J. BARKER

History

Ph.D., Duke University

FREDERICKA BELL-BERTI

Communication Sciences & Disorders

Ph.D., City University of New York

BERTRAND P. BOUCHER

Geography-Urban Studies

M.A., University of Colorado

JAMES BOYLAN

Anthropology

Ph.D., Wayne State University

KENNETH BROOK

Anthropology

Ph.D., City College of New York

MARTIN BROWN

Psychology

Ed.D., Rutgers University

LEONARD J. BUCHNER

Psychology

Ph.D., Columbia University

G. CARACCILO

Communication Sciences & Disorders

M.A., Montclair State College

BARBARA CHASIN

Sociology

Ph.D., University of Iowa

ROBERT CHERRY

Economics

Ph.D., University of Kansas

ROBERT A. CICERONE

Psychology

Ph.D., University of Maine

DOROTHY CINQUEMANI

Anthropology

Ph.D., Columbia University

PHILIP S. COHEN

History

Ph.D., New York University

JOSEPH CONTESSA

Geography-Urban Studies

Ph.D., Southern Illinois University

GARY DANIELSON

Psychology

M.S., Florida State University

SURESH DESAI

Economics

Ph.D., University of California

RICHARD D. DRAPER

Psychology

Ph.D., Purdue University

WALTER R. DURYEA

Psychology

Ph.D., Florida State University

GLADYS ELLENBOGEN

Economics

Ph.D., University of Wisconsin

HAROLD FLINT

Economics

Ph.D., Southern Illinois University

DANIEL C. FOSS

Sociology

Ph.D., New York University

RICHARD FRANKE

Anthropology

Ph.D., Harvard University

PETER FREUND

Sociology
Ph.D., New School for Social Research

MARK J. FRIEDMAN

Psychology
Ph.D., Purdue University

STEPHEN FRIEDMAN

Psychology
Ph.D., University of California

MARGARITA GARCIA

Psychology
Ph.D., Columbia University

MARILYN GONYO

Communication Sciences & Disorders
M.A., Newark State College

ROBERT GOODKIN

Psychology
Ph.D., Florida State University

LAURA GORDON

Sociology
Ph.D., SUNY, Stony Brook

HERBERT J. HAUER

Psychology
Ph.D., New York University

EDWARD J. HAUPT

Psychology
Ph.D., New York University

WARREN HEISS

Communication Sciences & Disorders
Ed.D., Yeshiva University

THERESE M. HERMAN

Psychology
Ph.D., New School for Social Research

GILBERT HOURTOULE

Political Science
Ph.D., Penn State University

EDWARD W. JOHNSON

Political Science
Ph.D., New York University

EVA KANTOR

Psychology
Ph.D., Boston University

JAMES KEENEN

History
Ed.D., Columbia University

BYONG-SUH KIM

Sociology
Ph.D., Emory University

HARRIET M. KLEIN

Anthropology
Ph.D., Columbia University

MARK A. KOPPEL

Psychology
Ph.D., Northwestern University

WALTER E. KOPS

History
M.A., Montclair State College

DORIS R. KRAEMER

Psychology
Ph.D., Yeshiva University

SYDNEY KRONISH

Economics
Ph.D., New School for Social Research

JANE KRUMACHER

Psychology
Ed.D., New York University

EDITH KURZWEIL

Sociology
Ph.D., New School for Social Research

MARGARET M. LAHEY

Communication Sciences & Disorders
Ed.D., Columbia University

GILBERT LEIGHT

Communication Sciences & Disorders
Ph.D., Columbia University

MOIRA K. LeMAY

Psychology
Ph.D., Penn State University

MICHAEL LINDENMAN

Communication Sciences & Disorders
M.A., Trenton State College

JAY LIVINGSTON

Sociology
Ph.D., Harvard University

PAUL LOCHER

Psychology

Ph.D., Penn State University

GEORGE T. MARTIN

Sociology

Ph.D., University of Chicago

MEREDITH E. MCGUIRE

Sociology

Ph.D., New School for Social Research

GEORGE T. MENAKE

Political Science

Ph.D., New York University

LOIS A. MORE

History

Ed.D., Columbia University

AGNES N. O'CONNELL

Psychology

Ph.D., Rutgers University

J. KENNETH OLENIK

History

Ph.D., Cornell University

SHARON OSGOOD

Psychology

Ph.D., New School for Social Research

PETER PASTOR

History

Ph.D., New York University

THOMAS B. PERERA

Psychology

Ph.D., Columbia University

SAMUEL PRATT

Sociology

Ph.D., University of Michigan

DANIEL J. PROSSER

History

Ph.D., Northwestern University

BERTHA B. QUINTANA

Anthropology

Ed.D., New York University

MARGARET REILLY-PETRONE

Economics

Ph.D., Fordham University

DAVID ROBERTSON

Geography-Urban Studies

Ph.D., Rutgers University

GEORGE ROTTER

Psychology

Ph.D., New York University

HELEN E. ROYER

History

Ph.D., Penn State University

CHARITY RUNDEN

Psychology

Ph.D., Indiana University

MAURIE SACHS

Anthropology

Ph.D., Columbia University

NAOMI SCHIFF

Communication Sciences & Disorders

Ph.D., Columbia University

HAROLD M. SCHOLL

Communication Sciences & Disorders

Ed.D., Columbia University

TERRY D. SCHON

Communication Sciences & Disorders

Ph.D., Syracuse University

JEROLD SCHWARTZ

Psychology

Ph.D., Yeshiva University

JOEL SCHWARTZ

History

Ph.D., University of Chicago

JEROME M. SEIDMAN

Psychology

Ph.D., New York University

JOHN SEYMOUR

Psychology

Ph.D., New York University

ABBIE F. SHAPIRO-SALNY

Psychology

Ed.D., Rutgers University

EDWARD SHULMAN

Communication Sciences & Disorders

Ph.D., State University of Iowa

ROLAND SIITER

Psychology

Ph.D., Purdue University

HARBANS SINGH

Geography-Urban Studies

Ph.D., Rutgers University

ROLF STERNBERG

Geography-Urban Studies

Ph.D., Syracuse University

IRA R. SUGARMAN

Psychology

Ph.D., Columbia University

ROBERT TAYLOR

Geography-Urban Studies

Ph.D., St. Louis University

DAVID J. TOWNSEND

Psychology

Ph.D., Wayne State University

RHODA UNGER

Psychology

Ph.D., Harvard University

CHARLES M.B. UTETE

Political Science

Ph.D., Carlton University

DANIEL E. WILLIAMS

Psychology

Ph.D., St. John's University

BERTON J. WISER

Psychology

M.S., Purdue University

GERALD WOOLF

Communication Sciences & Disorders

Ph.D., New York University

PETER F. WORMS

Psychology

Ed.D., Rutgers University

LOUIS B. ZIMMER

History

Ph.D., New York University

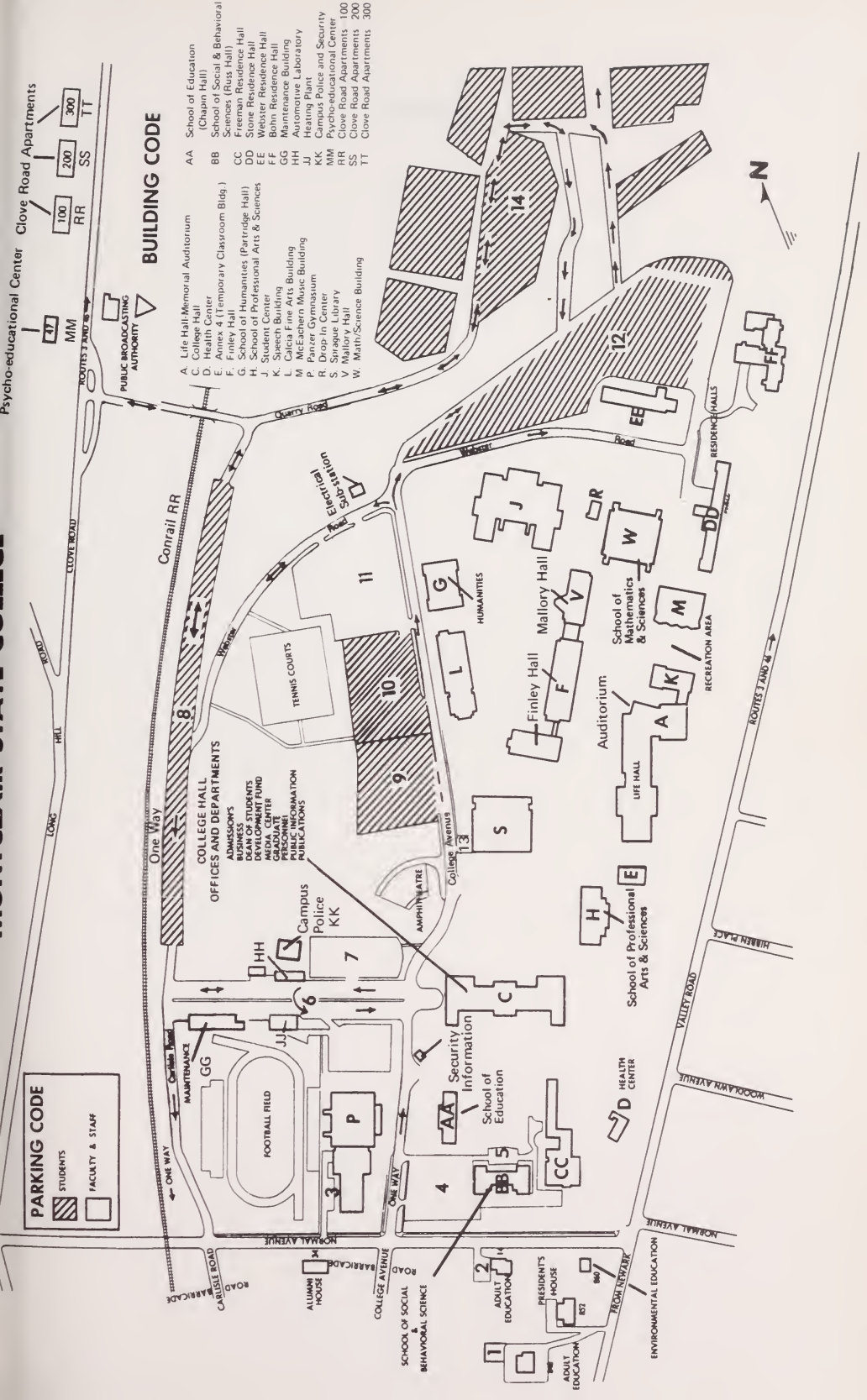
INDEX

- Academic policies 12
- Accreditation.....5
- Administration and Supervision.....54
- Admission.....9
- Adult Continuing Education.....21
- American Literature68
- Anthropology134,139
- Application for degree.....9
- Audiology.....36,38,42
- Biology.....23
- British Literature.....67
- Business and Distributive Education.....29
- Cancellation of courses.....14
- Certification requirements.....14
- Change of courses.....14
- Change of degree.....14
- Chemistry.....33
- Commencement.....15
- Communication Sciences and Disorders36,38
- Comparative Literature.....68
- Comprehensive examination.....15
- Course load.....12
- Curriculum and Teaching.....47
- Doctoral in Educational Administration72
- Economics.....135,141
- Educational and Community Services, School of.....18
- Educational Foundations.....53
- Educational Leadership.....55
- Educational Psychology.....124
- Educational Research and Evaluation63
- English and Comparative Literature.....66
- Environmental Studies.....71
- Facilities and services.....6
- Faculty173
- Fees.....16
- Final evaluation.....15
- Financial assistance.....17
- Fine and Performing Arts, School of.....18
- Fine Arts74
- Foreign applicants10
- French82
- General Information.....7
- Geography and Urban Studies.....135,142
- Geoscience.....85
- Goals5
- Grades13
- Graduate Council.....7
- Graduate faculty.....173
- Graduation requirements.....15
- Hard of Hearing and Deaf.....36,38
- Health Education.....90
- Health services.....6
- History137,144
- History and governance5
- Home Economics.....94
- Human organizational processes166
- Human sexuality.....124
- Humanities, School of19
- Industrial Education and Technology.....98
- Learning disabilities.....38,40,42
- Library6
- Master of Arts in Teaching.....48
- Mathematics102
- Mathematics and Science, School of.....19
- Media Center6
- Music.....109
- Non-degree application.....9
- Non-degree certification168
- Non-Western cultures.....137
- Parking6
- Physical Education118
- Political Science.....138,146
- Post-Baccalaureate certification168
- Post-MA certification.....168
- Post-Master Technical offerings172
- Professional Arts and Sciences, School of19
- Programs offerings.....
- Psychology123,126
- Public Media Arts157
- Reading58,61
- Registration.....13
- Restrictions12
- School Psychologist127
- Senior-graduate students.....11
- Social and Behavioral Sciences, School of.....20
- Social Sciences.....134
- Sociology.....139,148
- Spanish151
- Special Education155
- Speech157
- Speech and Theater156
- Speech Pathology36,38,45
- Student parking.....6
- Student Personnel Services162
- Teacher of Behaviorally Disturbed.....36
- Teaching.....48
- Technology in Education.....62
- Theater156
- Thesis15
- Time limit.....12
- Transfer credit.....12
- Tuition16
- Veterans Administration.....10

Montclair State College is an equal opportunity/affirmative action institution.

The College does not discriminate on the bases of sex, race, color, or national origin in the operation of its educational program or activities (admissions, access to programs and course offerings, physical education, competitive athletics, counseling, student and other employment, use of facilities and school sponsored extra curricular activities) in accordance with Title IX of the Education Amendments of 1972 and Title VI of the Civil Rights Act of 1964.

Inquiries may be directed to the designated employee for Title IX compliance in the office of the Dean of Students C-217.



NOTES:

OFFICE OF ADMISSIONS
MONTCLAIR STATE COLLEGE
UPPER MONTCLAIR, N.J. 07043

Non-Profit Organization
U.S. Postage
PAID
Permit Number 102
Upper Montclair, N.J.

RETURN REQUESTED



Montclair State College

78/80

Graduate Catalog

EQUAL OPPORTUNITY STATEMENT

Montclair State College is an equal opportunity/affirmative action institution and does not discriminate on the basis of sex, race, color, national origin, age, or physical capabilities in the operation of its educational program or activities (admissions, access to programs and course offerings, physical education, competitive and intramural athletics, counseling, student and other employment, use of facilities, and college sponsored extra curricular activities). This is in accordance with Title VI of the Civil Rights Acts of 1964, which prohibits discrimination on the basis of race, color, or national origin, Title IX of the Education Amendments of 1972 which prohibits sex discrimination, and Section 504 of the Rehabilitation Act of 1973 as amended, which prohibits discrimination against otherwise qualified handicapped people.

Inquiries may be directed to Dr. Edward C. Martin, Associate Dean of Students (and Designated Employee for Title IX and Section 504 compliance) 217 College Hall, Telephone 893-4118, or Ms. Anita Walters, Director of Equal Opportunity/Affirmative Action Office, 318-A College Hall, Telephone 893-4349.

The Graduate Catalog of Montclair State College is published biennially and presents announcements of general information, general academic regulations, and the College's academic program extant at the date of publication. The College reserves the right to change its announcements and regulations whenever such action is deemed appropriate and necessary.

**Office of Publications
Montclair State College Bulletin
Volume 70, Number 4**

Montclair State College

Graduate Catalog 1978 - 1980

Upper Montclair, New Jersey

ACADEMIC CALENDAR 1978-79

Fall Semester 1978

August 28-30	Registration Evening Registration August 28-29.
September 1	Classes begin
September 2-4	Labor Day Holiday
September 5-November 22	Classes. Classes on November 22 will meet until the regular close of the college day.
November 23-26	Thanksgiving Holiday
November 27-December 15	Classes
December 16-22	Examination Period
December 23-January 1	Christmas Holiday

Winter Session 1979

December 28	Registration
January 2-19	Classes. Classes will be held Saturday 1/6/79 to make up for 1/1/79. Classes will also meet on 1/15/79.

Spring Semester 1979

January 16-18	Registration Evening Registration January 16-17. If the college is closed because of bad weather during this period, registration schedule moves forward by one day.
January 22-April 8	Classes
April 9-15	Spring Recess
April 16-May 15	Classes. Classes on April 16 begin at 8 a.m.
May 16-22	Examination Period
May 23, 3:30 p.m.	Commencement. Rain Date May 24.

Summer Session 1979

June 11-12	Registration
June 18-August 9	Eight Week Evening Classes
June 25-August 5	Six Week Classes
July 4	Holiday

THE COLLEGE RESERVES THE RIGHT TO MODIFY THIS CALENDAR

TABLE OF CONTENTS

About the College	7
About the Graduate Division	8
General Information	8
Admission to Graduate Study	10
Academic Information	13
Academic Policies and Regulations	13
Graduation Requirements	15
Tuition and Fees	19
Graduate Facilities	20
School of Educational and Community Services	22
Adult Continuing Education	24
Counseling, Human Services, and Guidance	26
Curriculum and Teaching	35
Educational Foundations	42
Educational Leadership	45
School of Fine and Performing Arts	58
Fine Arts	58
Music	64
Speech and Theater	73
School of Humanities	79
English and Comparative Literature	79
French	88
Spanish	92
School of Mathematics and Science	96
Biology	96
Chemistry	103
Geoscience	106
Mathematics and Computer Science	110
School of Professional Arts and Sciences	117
Business Education and Office Systems Administration	117
Health Professions	122
Home Economics	126
Industrial Education and Technology	130
Physical Education	134
School of Social and Behavioral Sciences	139
Communication Sciences and Disorders	140
Environmental Studies	151
Psychology	154
Social Sciences	165
Non-Degree Post-Baccalaureate/Post M.A.	
Approved Certification Programs	185
Graduate Faculty	189
Index	205



David W.D. Dickson, PhD
President, Montclair State College

Montclair State College offers over a score of selected M.A. programs of academic, social and economic usefulness, and a doctoral program in mathematics education carrying a Columbia degree in which we join with Columbia University Teachers College. Some of our programs in the arts and sciences are gateways to advanced work toward the PhD. Others prepare their graduates for the needs of commerce, industry, education and public service. We also encourage the enrollment of those seeking challenging advanced study unrelated to a degree but meaningful to their own intellectual interests and professional growth. In all cases our offerings are open to part and full time students and are available at hours convenient to commuters. Recent external evaluations of the academic quality of our programs were generally enthusiastic; we therefore seek to enroll and to challenge excellent students.

David W.D. Dickson

BOARD OF TRUSTEES*

Chairman
GERALD A. LeBOFF

Vice Chairman
ERNEST M. MAY

Secretary
MARY LEE JAMIESON

Ex Officio
DAVID W.D. DICKSON
MILLICENT G. ANISFIELD
MELVIN HAUSNER
W. LINCOLN HAWKINS
STEPHEN G. WEISS

Faculty Representative:

Student Representative: WILLIAM JOHNSON

*As of July 1, 1978

OFFICERS OF THE COLLEGE

President
DAVID W.D. DICKSON

Vice President
for Academic Affairs
IRWIN H. GAWLEY

Vice President
for Administration and Finance
ELLIOT I. MININBERG

Vice President
for Academic Services
ROBERT E. MacVANE

Dean of Students
LAWTON W. BLANTON, JR.

Dean of Graduate Studies
CARL J. SCHNEIDER

Deans of the Schools

PHILIP S. COHEN
School of Social and
Behavioral Sciences

HOUSTON G. ELAM
School of Professional
Arts and Sciences

WOLFGANG B. FLEISCHMANN
School of Humanities

RICHARD A. LYNDE
School of Mathematics
and Science (Interim)

DONALD M. MINTZ
School of Fine and Performing
Arts

ERCELL I. WATSON
School of Educational
and Community Services

ADMINISTRATION OF THE DIVISION OF GRADUATE STUDIES

Dean
CARL J. SCHNEIDER

Assistant Dean
CAROL JEAN EHLERS

Academic Advisors
STEPHEN D. DOBISH

Grants Administrator
ROBERT OGDEN

ACADEMIC AND ADMINISTRATIVE SERVICES

RAYMOND J. AST, JR.

Administrator of the Adult
Continuing Education Center

ALAN L. BUECHLER

Director of Admissions

MARSHALL A. BUTLER

Registrar

FRANK C. ERDMAN

Assistant Director of Admissions,
Graduate

M. PATRICIA FRIES

Evaluator, Office of the Registrar,
Graduate

BLANCHE HALLER

Director, Library Services

TRICIA V. HANEY

Director of Career Planning
and Placement

WILLIAM J. KERVICK

Director of Business Services

RANDALL W. RICHARDS

Director of Financial Aid



ABOUT THE COLLEGE

Location

The College is located on a 200 acre campus in Upper Montclair, New Jersey, an attractive suburban community fourteen miles from midtown Manhattan. As a result of the College's proximity to New York City, the students at Montclair State enjoy an opportunity to enrich their education through participation in the cultural, social and educational life of the metropolitan community of which we are part.

History and Governance

Montclair State College is a publicly supported institution of higher learning, deriving its primary income from the State of New Jersey. This basic income is supplemented by grants from government agencies and private foundations, as well as gifts from friends, alumni, corporations and other private philanthropic sources.

Founded in 1908 as a Normal School, the College was then primarily oriented to the education of public school teachers. In 1927 it became the State Teachers College at Montclair.

In July, 1958, the College assumed its present name to reflect a change from the strict focus on teacher education to a more traditional graduate and undergraduate education in the liberal arts and sciences.

The mission of Montclair State College as a multi-purpose public institution is to develop educated persons of inquiring, creative, and disciplined intelligence to be competent in careers that are fulfilling and to be socially responsible contributors to society. The College strives to graduate people on the Bachelor's and Master's level who have had excellent education in the arts and sciences and excellent specialized training built upon that basis.

Its graduate programs are of intrinsic merit and social utility, open to part and full time students and designed to qualify people to meet needs in commerce, industry, education and public service.

The College is dedicated to preparing students well in professional and career education. Its professional programs are of high quality and practical relevance to the world of work.

Accreditation and Memberships

The College is fully accredited by the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted the College full accreditation for the preparation of elementary and secondary school teachers and school services personnel.

The College is a member of the Council of Graduate Schools in the United States, the Northeastern Association of Graduate Schools, the American Association of State Colleges and Universities, the American Council of Education, the New Jersey Association of Colleges and Universities, and the American Association of Colleges for Teacher Education. Women graduates of the College are eligible for membership in the American Association of University Women.

The Department of Chemistry in the School of Mathematics and Science is accredited by the American Chemical Society. The Department of Music in the School of Fine and Performing Arts is accredited by the National Association of Schools of Music.

ABOUT THE GRADUATE DIVISION

History and Organization

Graduate work leading to the Master of Arts degree was first approved by the State Board of Education in 1932; in 1933 the Master of Arts degree was awarded to thirteen students in the field of professional education. In 1966 the state authorized the first Master's degree program for students other than teachers or school administrators. Since then new graduate degree programs in the liberal arts and sciences and other professional fields have been added, paralleling the College's development as a multi-purpose institution. In 1977, 750 Master of Arts degrees were awarded to candidates from the six schools. No degrees beyond the Master of Arts are offered at Montclair State College. To serve the needs of the predominantly part-time graduate student body, all graduate courses are offered in the evening.

General policy governing graduate education at Montclair State College is determined by the Graduate Council composed of two graduate faculty members and one graduate student from each school, two academic deans elected by the Dean's Council and the Director of Library Services. The Dean of Graduate Studies is Chairman of the Graduate Council.

Responsibility for the overall planning, development and administration of post-baccalaureate education at the College is vested in the Division of Graduate Studies, a separate administrative unit within the Office of the Vice President for Academic Affairs and headed by the Dean of Graduate Studies.

The Division of Graduate Studies, in conjunction with the Graduate Council, develops policies and procedures for the conduct of all graduate study and sees to their implementation. In conjunction with the Admissions Office, it processes and evaluates the records of persons applying for entry; its professional staff works closely with students and the departments to facilitate the progress of students from admission to graduation.

Counseling and Advisement

Each department offering a graduate program has one or more Graduate Advisors who are responsible for meeting, counseling and recommending for admission all candidates for degree and approved certification programs. The work program of all students admitted for matriculation is developed by the Graduate Advisor. Students who need advisement about courses, course substitutions, change of major program, or their academic progress should consult their Graduate Advisor.

Persons desiring general information or advisement are invited to direct their questions to one of the Academic Advisors in the Graduate Office.

Program Offerings

At present the six schools offer twenty-three graduate degree programs along with a number of non-degree programs leading to advanced certification.

SCHOOL OF EDUCATIONAL AND COMMUNITY SERVICES

Educational Leadership (Administration and Supervision)

Reading

Counseling, Human Services, Guidance (Student Personnel Services)

Teaching (Master of Arts in Teaching)

SCHOOL OF FINE AND PERFORMING ARTS

Fine Arts

Music

Speech and Theater

SCHOOL OF HUMANITIES

English and Comparative Literature

French

Spanish

SCHOOL OF MATHEMATICS AND SCIENCE

Biology

Chemistry

Geoscience

Mathematics and Computer Science

SCHOOL OF PROFESSIONAL ARTS AND SCIENCES

Business Education and Distributive Education

Health Professions

Home Economics

Industrial Education and Technology

Physical Education

SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

Communication Sciences and Disorders

Psychology (Educational, General, Industrial)

Environmental Studies*

Social Sciences

* An inter-disciplinary program including education, science and the social sciences.

ADMISSION TO GRADUATE STUDY

To be admitted to graduate study at Montclair State College an applicant must have a baccalaureate degree from an accredited college or university in the United States, or its equivalent from a foreign institution of higher education. To be matriculated in a particular degree or certification program, the applicant must be accepted by the department offering that program and approved by the Dean of Graduate Studies.

Applicants are evaluated on several criteria (e.g., grade point average, national test scores, recommendations, interviews, essays, portfolios, auditions, etc.) to enable the College to identify those students who demonstrate the greatest promise of scholarly achievement and ability to benefit from their proposed program of study.

Application

Applications and instructions for submission of supporting credentials may be obtained from the Office of Admissions/Graduate. The completed application must be sent to the Admissions Office/Graduate with a non-refundable fee of \$10.

Deadlines

Applications should be on file in the Admissions Office by July 1 for fall admission, by November 1 for admission the following spring semester, and by April 1 for admission in the summer session.

General Requirements

Transcript. Two copies of an official transcript must be submitted from each college and university attended.

Graduate Record Examination (GRE). The GRE aptitude test is required of all students applying for admission to a degree program; some departments also require the GRE advanced test in the applicant's proposed field of study and/or the Miller Analogies Test. Students should check the department statement in this Bulletin for specific requirements.

Although students applying for admission to a non-degree certification program are not usually required to take one of the standardized tests, they should consult the Graduate Office for possible exceptions.

Students should make arrangements to have an official notification of their GRE test scores sent directly to the Office of Admissions/Graduate. Since it generally takes about six weeks for test scores to reach the college, students are advised to take the required test as soon as possible after applying for admission. Information about the GRE may be obtained from the Educational Testing Service, Princeton, New Jersey 08540, or from the Office of Graduate Studies at Montclair State College.

Recommendations. Recommendations from at least two persons who are qualified to evaluate the applicant's promise of academic achievement are required for admission to all degree programs and for persons applying for admission to the non-degree certification program in Speech Therapy and Learning Disabilities in the Department of Communication Sciences & Disorders.

Statement of Objectives. All students applying for admission are asked to provide a statement outlining their goals and purposes in the graduate study they wish to pursue.

Teaching Certificate. A copy of an applicant's teaching certificate(s) is required of

all students seeking admission to a program leading to advanced certification or certification in an additional teaching field.

Acceptance Procedure

Final action on an application cannot be taken until all supporting credentials have been received in the Office of Admissions. However, applicants whose transcript showing conferment of a bachelor's degree has been received will be given permission to register for six semester hours on a prematriculated basis.

Completed application folders are reviewed initially by the Graduate Office. Applicants who meet the College minimum standards for admission will be advised by letter to arrange a conference with the graduate advisor of the department in which the student wishes to study. The department advisor will evaluate the student's qualifications for acceptance into the program and make appropriate recommendations to the Graduate Office.

Matriculation

Students who are accepted in a degree or certification program will be formally matriculated and given an official work program which is developed in conference with the graduate advisor with the approval of the Graduate Office. The student will receive official notification of matriculation from the Office of Graduate Studies.

Deferred Matriculation

Applicants with marginal qualifications or inadequate preparation may, upon recommendation of the department and approval of the Dean of Graduate Studies, be admitted to study on a conditional basis (deferred matriculation) with the understanding that eligibility for matriculation will be established in a manner prescribed by the department in which the student wishes to matriculate. Course work and other study undertaken to remedy the deficiency or to demonstrate the ability to do graduate-level work may be in addition to the regular program requirements.

Non-Degree Students

Individuals who have a baccalaureate degree and want to enroll for particular courses to satisfy personal interests without reference to matriculation in any degree or certification program may apply for admission as a non-degree student. Applications for this status do not require the supporting credentials specified above for degree or certification programs, except for the transcript showing possession of a bachelor's degree and the statement of objectives.

Admission on a non-degree basis does not imply acceptance in or eligibility for matriculation in any degree or certification program.

Termination of Acceptance

Students admitted to either a degree or a non-degree certification program must enroll for course work within one academic year or the acceptance terminates.

Admission of Veterans

Veterans seeking admission to the Division of Graduate Studies should apply to the Veterans Administration for a certificate of eligibility and entitlement well in advance of the registration date. These forms may be obtained at the Veterans Administration office at 20 Washington Place, Newark, New Jersey.

The Veterans Administration has established certain limitations, particularly with

regard to changes in courses. It therefore becomes important that the veteran clearly state his educational objectives on all appropriate forms.

To ensure that his application is in order, and that the veteran has fulfilled the requirements of the GI bill, the veteran should report during registration to the Veterans' Counselor.

Foreign Applicants

Foreign applicants should obtain the Application for Admission to an Educational Institution in the United States from the Office of Admissions, and return the completed form to the office at least one month prior to the normal deadline.

As proficiency in spoken and written English is prerequisite to graduate study at Montclair State College, the College requires foreign applicants for whom English is not a native language to take the Test of English as a Foreign Language, administered worldwide by the Educational Testing Service of Princeton, New Jersey. Scores from this test should reach the Office of Admissions no later than the normal deadline.

Qualified Seniors

Montclair State College undergraduates with an academic average of at least 2.67, who are within 16 semester hours of graduation, may take up to six semester hours of graduate work.

In order to be eligible to take graduate courses, a qualified senior must complete the appropriate application, which is available in the Graduate Office. This application must be approved by the Registrar, the chairperson of the department in which the student wishes to study and the Dean of Graduate Studies.

Qualified undergraduates taking graduate courses for graduate credit must pay appropriate fees and tuition at the regular graduate student rates. Admission of an undergraduate to courses at the graduate level does not imply future acceptance into a graduate degree program.

ACADEMIC POLICIES AND REGULATIONS

Course Load

A minimum of 12 semester hours constitutes a full-time course load. Part-time graduate students may not register for more than nine semester hours of credit a semester, including summer sessions. The Division of Graduate Studies recommends that the part-time student who is fully employed take no more than six semester hours of course work in any one semester.

Course Numbering

Most courses numbered from 400 through 499 are senior-graduate courses. They may be taken for graduate credit only with the permission of the Graduate Advisor in the student's major department and only to the extent approved by regulations of the Division of Graduate Studies. At this time, no more than 25 percent of courses offered for the Master of Arts degree may be numbered from 400 through 499. Courses numbered below 400 are not acceptable for graduate credit.

Courses numbered 500 and above are open only to graduate students; they are scheduled in the late afternoon and evening during the fall and spring semesters. Summer session graduate courses are scheduled both in the day and evening.

Restrictions for Graduate Credit

No credit is granted toward the Master of Arts degree for certain 400 level courses which are required for initial certification.

Courses taken ten or more years prior to the date of the student's matriculation will not be accepted for credit toward the Master of Arts degree, except upon recommendation by the major department and approval of the Dean of Graduate Studies.

No more than six semester hours of credit may be allowed for courses completed at Montclair State College prior to matriculation for the Master's degree, except in specially designated programs.

No graduate credit is allowed for courses taken at other colleges while the student is enrolled at Montclair State College unless the student obtains prior approval from the Dean of Graduate Studies. A form for this purpose is available in the Graduate Office and should be completed well before the transfer credit is needed.

Credit is not allowed for courses taken on an audit basis.

It is the obligation of each student to ensure that no course undertaken for graduate credit duplicates a course previously taken by that student. Courses may not be taken more than once for credit regardless of any change in the course number or title.

Transfer Credit

A student may transfer six semester hours of graduate credit earned at an accredited college or university toward the Master of Arts degree at Montclair State College, provided the student obtains approval from the departmental Graduate Advisor and the Dean of Graduate Studies. This approval must be noted on the student's work program. Grades below B are not accepted for transfer credit.

Time Limit

Work for the Master of Arts degree must be completed within six years from the date of matriculation unless the Dean of Graduate Studies approves an extension. Applications for extension will be reviewed and evaluated by the Graduate Dean on the basis of

the student's progress toward the degree and in accordance with established graduate policy at the time of application.

Grades and Standards

There are eight grades used at Montclair State College:

A — Excellent	F — Failure
B — Good	INC — Incomplete
C — Fair	WD — Withdrew
D — Poor	NC — No Credit

No graduate credit is allowed for courses completed with grades below C. In order to qualify for the Master of Arts degree a student must present a grade point average of 3.00 (B). Students may repeat a grade of D or F with the approval of the Dean of Graduate Studies.

The grade of F signifies: (1) academic failure, (2) failure of the student to submit written notice of withdrawal, or (3) withdrawal after the midpoint in the semester. The mark WD is given to those who submit in writing to the Office of the Registrar their intention of withdrawing from a course before the midpoint of the semester.

The mark INC indicates that a student was unable to complete the course work by the end of the semester because of illness or other exceptional circumstance. Course work for INC grades received in the fall semester must be completed by the end of the spring semester; work for spring and summer INC grades must be completed by the end of the fall semester. Failure of the student to complete the assigned course work by the given date will result in a final grade of F. Deadlines are adjusted for courses which meet for more or less than a full semester.

Any matriculated student whose grades fall below the required B average will be placed on academic probation and will be given one semester, within one year from date of first notification of probationary status, to achieve the required average. Failure to obtain the required average within the prescribed period of time leads to final review which may result in the termination of matriculated status. Notice of such action will be sent to the student by the Dean of Graduate Studies after consultation with the departmental graduate advisor. A student may appeal such action in writing to the Dean of Graduate Studies.

An official record of credits and grades earned will be mailed to the student following the close of each semester.

Registration Procedure

All graduate students who were registered at Montclair State College during a semester will receive registration materials for the next semester allowing them to register for the following semester by mail. New students who apply after the cut-off date for mail registration, or students not registered in the previous semester, must register in person.

Details about registration procedures and deadlines may be obtained from the Office of the Registrar.

GRADUATION REQUIREMENTS

Program of Study

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be required to satisfy prerequisites or special programmatic purposes.

Each student must pass a comprehensive examination in his /her field, either oral or written, or both.

Students are also required to demonstrate their ability to execute and report on an independent research project or other creative production. This requirement may be satisfied in one of several ways: (1) a project report written in connection with a required departmental seminar, (2) a Master's Thesis, or (3) the production of a creative project in the fine and performing arts or humanities. The option selected must have departmental approval.

A department may accept the Master's thesis as equivalent to a required seminar and/or in lieu of all or part of the comprehensive examination.

Thesis

A student writing a thesis must register for the appropriate departmental thesis course and will be expected to complete the thesis within one calendar year. A six month extension may be granted by the Dean of Graduate Studies after consultation with the student's graduate advisor. If granted an extension, the student must re-register for the departmental thesis course on a no-credit basis and pay a fee for two semester hours. No further extension will be granted except under unusual circumstances. Failure to complete the thesis within the prescribed time will result in an F grade. Special permission must be secured from the Dean of Graduate Studies to repeat the thesis credit.

The thesis must be submitted six weeks prior to commencement. A copy must be submitted to the Graduate Dean for final acceptance.

Comprehensive Examination

The comprehensive examination is open only to matriculated students and is usually administered once in October and once in March. Students should check with their departmental graduate advisor to determine the date on which the examination will be offered.

It is the student's responsibility to file the "Notification for Comprehensive Examination" form with the graduate advisor. The form is available in the Graduate Office and should be filed at least six weeks prior to the examination date.

Students who fail the comprehensive examination are permitted to retake it twice.

Application for Final Evaluation

Students anticipating completion of their degree and/or post-baccalaureate certification requirements must apply to have their eligibility for the conferment of the degree or certificate evaluated by the Office of the Registrar. The application form is obtained in the Registrar's Office; it must be completed and returned by March 1 for August conferment, by June 1 for January conferment, and by October 1 for June conferment.

Commencement

Commencement exercises are held each Spring.

Students who meet the scholastic requirements for their degree and who have

fulfilled all obligations to the College in January, June or August will be awarded diplomas.

Participation in the commencement by June graduates is expected unless a request for conferment in absentia is approved by the Dean of Graduate Studies prior to the date of commencement. January and August graduates are also invited to attend the exercises.

FINANCIAL ASSISTANCE

Graduate Assistantships

A limited number of graduate teaching assistantships are available in some instructional departments. Duties vary according to the needs of the department and require fifteen hours of service a week. Each assistant receives a stipend of \$3,000 and remission of tuition and general fees. A few assistantships may also be available in non-instructional departments and offices under the same terms. Further information may be obtained from the Division of Graduate Studies or the appropriate department.

The Charles Bargerstock Memorial Scholarship

This scholarship, established in memory of the founder and director of Career Services at Montclair State College from 1971-1976, is open to a graduate student enrolled in the Department of Counseling, Human Services and Guidance. Further requirements are (1) availability for an internship in the Career Services Office for ten hours weekly for two semesters and (2) motivation toward serving as a competent career counselor and placement officer. One scholarship will be awarded each academic year. The stipend is \$500 (\$250 per semester). Persons interested in applying should contact the Charles Bargerstock Memorial Scholarship Committee, c/o Career Services Office, Life Hall, Montclair State College.

Opportunities for Part-Time Employment

Montclair State College, through its Career Services Office, offers opportunities for students who desire off-campus part-time work after school, weekends and during vacations. The employment service does not guarantee jobs but there is no scarcity of opportunities.

Additional opportunities are available on campus for students to earn income as laboratory or dormitory assistants, secretarial and clerical assistants, or tutors. Further information on these positions may be obtained from the Financial Aid Office.

National Direct Student Loan Program

To be eligible for a loan, an applicant must be a citizen or national of the United States, or must have such immigration status and personal plans as to indicate that he is in the United States for other than a temporary purpose. Therefore, persons who are in this country on such visas as an "F" student visa or a visitor's visa, are not eligible.

The applicant must be a full-time college student on the graduate level in an institution of higher education participating in the National Direct Student Loan Program or be accepted for admission as a full-time student in such an institution.

The maximum a student may borrow depends upon the government's appropriation and number of applicants. The borrower must sign a note for his loan.

The interest rate on these loans is three percent per year. Interest begins nine months after the student ends his full-time studies. The first payment is due nine months after the end of the student's full-time studies, with some exceptions. The National Direct Student Loan Act provides that repayments are to be completed according to the repayment schedule. The above program is subject to change by the Department of Health, Education and Welfare.

New Jersey State Student Loan Program

Loans are made by any participating banking or savings and loan institution in the

state. Loans are guaranteed by the New Jersey Higher Education Assistance Authority.

A list of banks participating in this program may be obtained from the New Jersey Higher Education Assistance Authority or the College's financial aid advisor.

Maximum loan: Each graduate year - \$5,000.

Loan applicants must follow all procedures in effect at the time of the application.



TUITION AND FEES*

Tuition Charge

Graduate tuition, for those students who hold at least a bachelor's degree, per semester hour of credit. (in state).....	\$45.00
(out of state)	65.00

Fees (Non-refundable)

Student Building fee, paid each time a student registers.	3.00
per semester hour to a maximum of	36.00
General Service fee, paid each time a student registers per semester hour ..	1.50
Late registration fee, for all students who register after the regular registration period	15.00
Change of Class Schedule fee, for students who after their initial registration each semester, make a change or changes in their original class schedule other than withdrawal from a course. Each course.....	5.00

Application Fee

Each application for admission must be accompanied by a non-refundable application fee of	10.00
--	-------

Transcript Fee

For each copy of a student's transcript.	2.00
Inquiries about procedures for requesting transcripts should be directed to the Registrar.	

Payment Instructions

All checks should be made payable to: Montclair State College

Refunding of Fees

Refunds are made under circumstances detailed below if a student officially withdraws from a class by filing a written notification with the Office of the Registrar.**

The following schedule of refunds has been established by the New Jersey state colleges:

Period of Withdrawal	Percent Refunded
Before courses begin	100%
During first third of course.....	50%
After first third of course.....	None

The percentage of refund is based on the total obligation. Tuition and service charges are refunded in full if classes are discontinued by the College.

In computing refunds, the date of withdrawal is the date on which the written notice of withdrawal is received in the Office of the Registrar.

*Subject to change at any time by action of the New Jersey Board of Higher Education.

**Ordinarily a minimum of 8 weeks should be allowed.

ACADEMIC FACILITIES AND STUDENT SERVICES

Library

The Harry A. Sprague Library invites all students and faculty to make full use of its many services. An informed and helpful staff of professional librarians is ready to aid with research needs and to assist in the use of the Library's various comprehensive collections. Aside from the fine reference and circulating book collections, the Library is a depository for United States and New Jersey government publications, has extensive holdings of periodicals and newspapers and is steadily developing a sizable collection of audio and video cassettes, filmstrips and records.

Materials not owned by the Library can often be obtained through the inter-library Loan Service of the Reference Department. Information on data bases in the nearby area is also available there.

The Library has acquired the necessary equipment for viewing and listening to its non-print materials. It also has readers and reader/printers to accommodate the various materials in microform. Other facilities include carrels, group conference rooms, a smoking lounge, coin-operated typewriters, copy machines and public telephones.

Media Center

The Center provides audio-visual materials, equipment and services for use by faculty and students for classroom instruction and presentation. The scheduling of all films for the College as well as their ordering, mailing and rental is also handled in the Center. Student aides are provided whenever the use of equipment is requested and are also available for other services. Video taping equipment is available for use by faculty and staff, as is a closed circuit television studio with its complementary equipment. Custom graphic and photographic production services exist that include slide copy, slide duplication, transparency production and graphic design. A technical shop maintains service and repairs all audio and visual equipment on campus. The staff of the Center is available for consultation on audio-visual problems, for demonstration of audio-visual materials and methods, and for special teaching and training in the area of audio-visual education.

Career Services

The Career Center exists to provide resource information and counseling for students and alumni seeking help in utilizing their college education in satisfying careers and occupations.

Services provided include career counseling, career library, credential service, graduate school catalogs, group seminars, newsletters, on-campus recruitment and employment referrals.

Counseling

The Drop-in Center provides peer counseling 24 hours a day, as well as round-the-clock referrals to on and off-campus facilities. A policy of strict confidentiality is observed.

The Center is staffed by an average of 20 students who serve on a volunteer basis. This staff is trained in Rogerian creative-listening technique and is familiar with the many resource materials which the Center has accumulated during its five years on campus.

The Drop-In Center is located between the Student Center and the Mathematics/Science Building. The telephone number is 893-5271.

The Office of Psychological Service with its staff of trained psychologists is available for students seeking professional assistance. Students will be given an initial interview and referred to community agencies as appropriate. The office is located in Annex E, telephone 893-5211.

Dining Facilities

For graduate students, who would be spending most of their time on campus in the evening, there are three dining options in the Student Center: the cafeteria, the Rathskeller which serves beer and wine as well as food, and the vending machines which provide sandwiches and cold snacks. A current MSC student ID card is required for admission to the Rathskeller. The Student Center is open when classes are in session throughout the academic year; during examination time and over holidays, modified hours will be posted.

Health Services

A registered nurse is on duty in the College Health Center twenty-four hours a day, Monday through Friday. Emergency medical care is also available. Regular office hours are from 8 a.m. to 4 p.m. After 4 p.m. the office is open for emergencies only. Telephone 893-4361.

Housing

Limited on-campus housing is available to graduate students. The Housing Office will provide students with handbooks, maps and names of listing agencies in the area; it also posts ads from home owners in the area who have rooms for rent. The Housing Office is located in Life Hall and is open daily from 8:30 a.m. to 4:30 p.m. For information, call 893-4155.

Insurance

A low-cost medical expense insurance program is offered to all students at Montclair State College, whether full or part-time graduate students. The annual premium is approximately \$35 and arrangements for coverage can be made through the Student Personnel Services Office, College Hall, Room 217.

Student I.D.'s

All students, faculty and staff are required to have a College-issued photographic Identification Card. This card must be shown to withdraw books from the Library, to obtain access to the Student Center Rathskeller and to participate in various activities sponsored by the Student Government Association.

All students currently holding an I.D. card will receive a validation sticker with their Class Schedule and their tuition payment receipt each semester. New students will be informed about procedures for obtaining their I.D. card at registration.

Parking

The College maintains several parking lots for use by students. These are designated on all campus maps. The College assumes no responsibility for cars or their contents while parked on College property.

Parking decals, available in the Business Services Office in College Hall, must be displayed on all cars parked on Campus.

GRADUATE PROGRAMS AND FIELDS of INSTRUCTION

SCHOOL OF EDUCATIONAL AND COMMUNITY SERVICES

Ercell I. Watson, Ed.D., Dean

The School of Educational and Community Services exists to provide professional educational services to the communities of the nation and particularly those of northern New Jersey. The specific components of society to which these services are directed are the individuals seeking admission to the teaching profession or preparation for areas of specialization or growth within the profession; public school systems; non-public schools; community agencies and business and industrial organizations. It is also concerned with the continuing development of the general field of education and those problems of society which are related to it.

The general role of the School is three-fold: (1) to make these services available in a manner which will be most accessible and useful to the recipients, (2) to utilize to the best advantage the training, experience and expertise of the staff in the performance of those services and (3) to act as a coordinating agency in working with other agencies of the College and community in mutual efforts of service. The general means of performing these services will be those of instruction, consultation, supervised laboratory experiences and research.

Current graduate programs in the School are designed to meet one or more of six needs: (1) instruction in Administration and Supervision (Educational Leadership) leading to the Master of Arts degree and New Jersey certification for positions of Supervisor, Principal or School Administrator; (2) instruction in Counseling, Human Services and Guidance, including School Social Worker (Visiting Teacher) leading to the Master of Arts degree and a New Jersey certification in guidance and/or school social work; (3) Master of Arts with a major in education to prepare liberal arts college graduates for teacher certification combined with further graduate study; (4) Master of Arts in Reading, leading to reading specialist certification, (5) advanced professional instruction for administrators, supervisors, counselors, and (6) advanced professional instruction for administrators, supervisors, counselors, classroom teachers and other personnel involved in educational pursuits.

Each of the areas within the field of education are listed separately. Students who are not candidates for a degree may elect any courses except those for which they may not have the necessary prerequisites or which are restricted to candidates in the field of specialization. Courses at the sixth year level are available in Educational Leadership, (Administration and Supervision).

Adult Continuing Education

Director: Mr. Raymond Ast

The faculty in Adult Continuing Education provides program services to students, volunteer groups, instructors, counselors, supervisors, administrators and others in communities and agencies throughout New Jersey and the nation. The programs offer direct

service to community education development efforts for adult educators, training programs for industrial and institutional employee career mobility, adult basic education and high school completion programs and teachers, continuing education unit technical assistance, and selected contractual consultant and service assistance. The Department utilizes College and community resources in the development of programs serving older adults, as well as the development of pre-retirement planning programs. Information dissemination of adult basic, secondary and continuing education, community education, and gerontological materials and resources is made available. Graduate credit courses are offered in adult and community education for individuals entering the field or seeking professional advancement. The academic program in Adult Continuing Education is administered through the Department of Educational Leadership.

Doctoral Program in Educational Administration With a Major Emphasis in Community Education

A cooperative program exists among Montclair State College, Worcester State College, the University of Vermont and the University of Connecticut for students who wish to pursue a Doctor of Philosophy degree in educational administration with a major emphasis in community education.

This consortium arrangement permits the taking of course work at the sending institutions which can then be transferred to the granting institution: the University of Connecticut.

At present, under ordinary conditions, the student should anticipate pursuing approximately 18 semester hours at the University of Connecticut plus completion of comprehensive examinations in three major areas, one year residence and a doctoral dissertation.

In each instance, the sending institution will do the initial screening and recommend candidates to the University of Connecticut for further consideration.

Candidates who are interested in exploring this degree program can receive further information and details about procedures from the Office of the Dean, School of Educational and Community Services, Montclair State College, Upper Montclair, New Jersey 07043.

ADULT CONTINUING EDUCATION

Course Descriptions

A-0807-0460 Curriculum and Instruction in Adult Education 3 sh

This course is designed to increase undergraduate and graduate student professional competence as an adult educator through the development of his/her knowledge, understanding, and application of theory, teaching techniques, and curriculum in the field of adult education.

**A-0807-0550 Philosophic Perspectives: Adult Continuing Education 3 sh
in the United States**

An examination of selective philosophic assumptions as well as social/cultural/political influences affecting the formats, systems and processes underlying programs of continuing education for adults in the United States.

**A-0807-0552 Community and Educational Program Planning 3 sh
and Development in Human Services**

A course designed to provide experiences for the student to translate the social, physical, intellectual, and psychological patterns and needs of learners into learning objectives applicable to program development in a community. There will be a special focus on adult learners but every level will be considered. Curricular materials and techniques will be developed and applied to the individualized programs of the various community and educational agencies involved in human services.

**A-0807-0553 Administration and Supervision of 3 sh
Adult Continuing Education**

Considers the various administrative and supervisory roles in directing a program in Adult Continuing Education. Particular attention will be given to an analysis and application of the technical, human relation and conceptual skills of administration to problems identified in Adult Continuing Education.

**A-0807-0554 The Role of the Para-professional and Volunteer in 3 sh
Adult Continuing Education**

A course designed to enable the professional to understand and utilize para-professionals and volunteers in a variety of educational and agency programs including community programs, neighborhood organizations, anti-poverty programs, and schools. Such roles include: counselor and family aides, clerical aides, library aides, AV aides, tutors and teacher aides. An emphasis will also be given to preparing and training para-professionals and volunteers for career ladder positions in adult continuing education.

**A-0807-0555 Training and Development in Adult and 3 sh
Community Organizations**

Application of principles and processes of adult education to large and small organizations, public and private, as they relate to both personal and corporate objectives. Programs in government, the armed forces, business, industry, labor and religious organizations will be examined.

**A-0807-0556 Organization and Development of a 3 sh
Community Education Program**

Designed to develop an awareness of the community education concept and to provide

skills and strategies for educational and community leaders in promoting and implementing community education.

A-0807-0559 Seminar and Practicum in Adult Continuing Education 3 sh

This course will provide in-class and field experience to practitioners in adult continuing and community education working particularly with educationally disadvantaged clients.

A-0807-0580 Community Education: Seminar and Internship 3-9 sh

A seminar and internship designed to provide exceptional administrative and leadership experiences in community education to students selected to participate as Center Interns at Montclair's Community Education Center.

Prerequisite: Permission from Center Director.

A-0807-0581 Community Education: Independent Study 3 sh

This course is designed to provide to graduate students an opportunity to increase their professional competence through a community education research project developing from their own need or problem area and custom-designed in consultation with the Community Education Development Center Director to bring an understanding and/or possible recommendations and solutions.

A-0807-0583 Community Education: Graduate Orientation Program 3 sh

To increase the student's professional competence, as a community educator through the development of his/her knowledge and understandings of current practices in the field of community education.

Prerequisite: Graduate student status.

A-0807-0650 Interdisciplinary Seminar in Adult Continuing Education 3 sh

Problem areas considered include values, communications, personality, perception, and organization. With problems basic to adult continuing education as its focus, the seminar brings together in a systematic fashion the pertinent knowledge, learnings, skills of appropriate related disciplines such as Psychology, Anthropology, Economics, Political Science, Sociology, and the Humanities.

A-0807-0651 Independent Study in Adult Continuing Education 3 sh

Designed for individuals who in consultation with an advisor wish to undertake either an in-depth analysis of a specific problem, or to design and implement a particular project in adult continuing education.

COUNSELING, HUMAN SERVICES, AND GUIDANCE

Chairman and Graduate Advisor: Dr. Richard A. Grey

Counseling, Human Services and Guidance are an integral part of the American scene. Schools and colleges, community agencies and industry, and state and federal governments have all developed services to aid students, workers and others to adjust to a changing society. Montclair State College has been a leader in the preparation of professional personnel to staff these efforts, in developing programs to identify new areas of counseling services, and in providing new approaches to the training of counselors and human services personnel.

Utilizing the resources identified through outreach programs, the department provides courses to train counselors and human services personnel to work with inner-city youth, Black and Puerto Rican communities, women, veterans, prisoners, re-entry adult learners, and drug and alcohol abuse. Building blocks of courses around the unique needs of specialized groups, the department offers programs for Spanish-speaking counselors, an extension program in Ocean County for residents of that area, and other programs tailored to specific needs.

Although we are involved in serving special interest groups, we shall continue to serve the needs of the larger population in the traditional settings.

Students are offered the opportunity to complete programs in the following concentrations:

- A. Counseling and Guidance.
- B. Human Services. The Human Services program prepares students for leadership roles in a variety of areas in which personal awareness, skills in group leadership, and the ability to facilitate communication within and among groups are required. Program participants are encouraged to become involved in personal development in the area of their choice. Students concentrating in Human Services may select one of the following options: (1) Human Services, with emphasis upon group dynamics, or (2) Human Services — Flexible, which combines group dynamics with a counseling component. A third option with an emphasis upon Human Services in Higher Education is being planned; interested students should consult the department chairman for further information about this option.

Completion of the Master of Arts program in Counseling and Guidance provides basic certification as School Guidance Counselor (SPS Certification).

Students may also complete the certification for School Social Workers as part of the departmental offerings.

Admission Requirements

All students must meet the admission requirements for graduate study at Montclair State College. In addition, they must be interviewed and accepted for matriculation by the departmental faculty.

Requirements for the Master of Arts Degree in Counseling, Human Services, and Guidance

- I. Core Areas 12 semester hours

Counseling and Guidance: 0826-580, 582, 585* and 588

*0842 may be substituted

Human Services: 0842-564, 565, 568

Human Services (Flexible): 0826-580, 582, 585*, 588

*0842-564 may be substituted

- II. Testing and Evaluation. 3 semester hours
Counseling and Guidance: 0826-579 or 0824-578
Human Services: No requirement
Human Services—Flexible: 0826-579 or 0824-578
- III. Psychological Foundations 6 semester hours
To be selected from Psychology Department offerings with the approval of the student's graduate advisor
- IV. Sociological/Economic Foundations 6 semester hours
Counseling and Guidance: 0826-581 and select one: 0821-540, 544, or 521.
Human Services: Elective, 3 semester hours only
Human Services—Flexible: 0826-581 and 3 sh elective
- V. Research 3 semester hours
All concentrations: 0824-503
- VI. Fieldwork 3 semester hours
Depending on concentration: 0826-654, 655 or 656

Note: Fieldwork/Practicum in each concentration consists of a field placement in a school guidance office or in a suitable alternative approved by the Fieldwork/Practicum instructor. A minimum of 150 hours of observation and contact with clients at the site is required. Periodical practica are held during the term in which the student is enrolled for the course to aid in coordination of the experience and its integration with the total curriculum. Experiences beyond course offerings, and fieldwork tailored to the specific needs of the people involved, are considered.
- VII. Electives: Students will complete elective courses to bring the graduate total to 39 semester hours.
- VIII. Comprehensive Examination or Thesis
The comprehensive examination or a Master's Thesis is required. Students selecting the thesis option should register for 0826-650: Research Seminar and Thesis Writing.

Minimum: 39 semester hours

Requirements for Certification

Guidance Counselor. In addition to completing the prescribed program of studies, persons wishing New Jersey State Certification in Guidance (SPS Certification) must have a bona-fide teaching certificate and one year of teaching experience *under certification*. The State Department of Education is currently revising the requirements for certification. Students are encouraged to consult the certification advisor in the Graduate Office regarding the new requirements.

School Social Worker. Those wishing to be certified as school social worker must

have a minimum of three years teaching experience or three years of experience in social work under approved supervision. Students should consult their graduate advisor for specific certification requirements.

Note: No specific certification is associated with the Human Services concentration, but many students in this area are able to complete requirements for either the guidance or school social worker certificate.

COUNSELING, HUMAN SERVICES AND GUIDANCE DEPARTMENT

Course Descriptions

F-0826-482 Career Consciousness

3 sh

This course in "career skills" integrates schematic human relations training and problem solving techniques with the definition of career goals. The ultimate aim is to define yourself and relate that information to the vocation you choose to pursue in life; to facilitate your successful "exit" from college into the real world. Each student will be required to look at him/herself through functional self-analysis, write a resume, and investigate the job market in his particular field through field trips, job interviews, or readings in the field.

Prerequisites: Residency in Freeman Hall during semester when taking course—Upperclassmen

Note: There are no prerequisites when offered in the Department of Student Personnel Services

F-0826-551 Guidance & Career Education in the Classroom

3 sh

This course is designed for teachers, counselors and counselors-in-training who are concerned with both guidance within the classroom and with the means of implementing career education/life planning within the classroom. The course emphasizes the role of the teacher and counselor in classroom guidance and career education/life planning. Field visits may be included in this course.

F-0826-560 Medical Problems in Education

3 sh

In this course the role of the educator is studied in relation to the following subject areas: childhood, chronic and contagious diseases, nutritional problems, narcotics, and psychosocio-medical pathologies. The impact of health problems on the family, school and community is emphasized throughout.

F-0826-562 Social Case Work I

3 sh

This course reviews principles in social case work as they relate to the school setting and social agencies. Study is devoted to the theoretical development of social work norms, and to the functional role of the social worker. Cases which have been developed by social workers will be studied and experience in a social work setting will be provided.

F-0826-565 The Role of the School Social Worker

3 sh

This course examines the historical development of social work in a school setting; its functional relationship to other supportive services, e.g. child study team, guidance and counseling and administration. Implicit in this course is the understanding of "brief case-work" as the primary treatment tool for problem solving and the importance of social

diagnosis, knowledge of and ability to relate to community resources, consultative and referral skills and ability to function in a non-social work setting.

F-0826-570 Counseling Adults

3 sh

This course is designed to identify the special needs of adults as they seek counseling. Special attention is given to the counseling needs of college students, adults returning to academic environs, women, minority groups, the handicapped, and other adults with special needs. Case studies, field visits, and supervised practice will be basic techniques employed.

Prerequisites: 0826:580 Principles of Guidance and Counseling or permission of Department Chairman

F-0826-579 The Use of Tests in Counseling

3 sh

This course is designed to familiarize counselors and school social workers with techniques for use and interpretation of test results. Implicit in this course will be the use of appropriate statistical analysis to draw conclusions for research and program development. Laboratory techniques will be used to give students practical opportunities to administer, score, and interpret a group of tests. Some time will be devoted to the planning of testing programs.

F-0826-580 Principles of Guidance and Counseling

3 sh

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance and counseling presented by children, adolescents and adults. The methods of gathering useful data are studied. Records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students utilizing both individual and group modalities. Field visits may be included in this course.

F-0826-581 Community Resources

3 sh

This course deals with the various agencies, industries and institutions available in the surrounding communities for use in guiding and referring clients. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging interviews and visits. Class discussion and personal research are supplemented by field trips.

Prerequisites: 0826:580 Principles of Guidance and Counseling or concurrent

F-0826-582 Career Guidance and Occupational Information

3 sh

Covers the principles of career guidance, use of tests and interest inventories in career guidance, sources and usage of career information, theories of career development, counseling on how to find and hold a job, and placement activities. Also includes an introduction to career education. Students will visit industries and post-secondary training.

Prerequisite: 0826-580.

F-0826-583 Educational Guidance

3 sh

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school programs of alternative education, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made.

Prerequisite: 0826-580 Principles of Guidance and Counseling

F-0826-585 Group Guidance and Counseling Activities**3 sh**

This course places emphasis on the distinctions between guidance and counseling techniques and the appropriate group activities for each purpose.

F-0826-586 Elementary School Guidance Services**3 sh**

This course is designed for elementary and middle school teachers and counselors-in-training who are concerned with supportive services related to human growth and life planning as a developmental process for their students. Special attention is given to the identification of problem areas and referral services.

F-0826-587 Administration and Supervision of Guidance Programs**3 sh**

Developing and administering programs of student registration, theory and techniques of scheduling, and supervisory responsibilities of the director of guidance. Coordinating guidance activities in a multi-school district or agency. Examination of current guidance practices; formation of proposals for improvement in programs where the student is working as a counselor and/or director.

Prerequisites: 0826-580 Principles of Guidance and Counseling and 6 semester hours in the Guidance Program of the Student Personnel Services M.A. Degree Program.

F-0826-588 Techniques of Interviewing and Counseling**3 sh**

Included in this course are techniques applicable to the interviewing and counseling of individuals and small groups. Directive as well as client-centered approaches are utilized. Specific attention is given to techniques such as role-playing, case studies, and audio/visual tape feedback.

Prerequisites: 0826-580 Principles of Guidance/Counseling

F-0826-589 Student Personnel Services in Higher Education**3 sh**

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

F-0826-601 Workshop in Education Guidance**3 sh**

Students will be exposed to experiences designed to reinforce previous leadership and membership skills. They will have the opportunity to develop, carry out and evaluate a project concerned with small groups. Students may work singly or in groups to carry out their project designs.

F-0826-650 Research Seminar and Thesis Writing**3 sh**

During the time that the student is preparing the research document she/he should enroll in 0826-650, Thesis Supervision. This entitles her/him to faculty advisement and conferences. If the student does not complete the document during the semester in which she/he enrolled for 0826-650, she/he is required to re-enroll in 0826-650 each semester (without credit) until the document is completed.

F-0826-654 Field Work/Practicum in Guidance and Counseling**3 sh**

The aim of the course is to introduce the student to various aspects of guidance and counseling through experience in schools and/or agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are

assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject.

Prerequisite: 21 semester hours and approval of Department Chairman.

F-0826-655 Field Work and Practicum in Social Work 3 sh

The student will be provided with an opportunity to participate in school social work in an actual school situation. Diagnostic skills, interviewing techniques, case recording, individual and group therapy, and the team approach will be observed and discussed. Under the guidance of a certified, experienced school social worker, the student will develop an understanding of the use of community resources. The student will be given an opportunity to observe special services (school social worker, psychologist, psychiatrist, speech or reading specialist, and teacher) in action as together a therapeutic plan is developed for the school pupil.

Prerequisite: 21 semester hours and approval of Department Chairman.

F-0826-670 Techniques of Evaluation 3 sh

Provides a background in the design, use and interpretation of statistical evidence.

F-0826-680 The Student Personnel Services Team 3 sh

Establishing the philosophy, membership, roles and functions of the various services that compose the Personnel Services team.

F-0826-682 Seminar in Advanced Career Guidance 3 sh

This seminar offers participants an in-depth exposure to such topics as latest sources and methods of utilizing career information, use of tests in career guidance, and theories of career development and their application in counseling, and developments in career education as they apply to counselors.

F-0842-327 Experiment in Coeducational Community Living 3 sh

The goal of the program is to integrate living and learning more closely by creating an atmosphere in which living is the experience that is the main source of learning. A seminar will provide the interpersonal and community skills necessary to enhance community living. Within the context of the seminar, the group will study and evaluate the process by which the community forms, through examination of the available literature and the living experience.

Prerequisite: Must be an upperclassman.

F-0842-420 Achievement Motivation Development Project 3 sh
(For Entering E.O.F. Freshmen)

This course is designed to supply entering E.O.F. Freshmen with information about self and environment, about what achievement is (the need or drive) and to introduce them to achievement behavior. The project further attempts to stimulate achievement behavior on the part of the student participants in simulated experiences. Participants will be constantly required to set goals, make decisions and assume personal responsibility.

F-0842-430 Interaction Analysis 3 sh

The purpose of this course is to help participants become more objective in their observations and reporting of interactions which they witness or in which they participate. Various observational tools and methods will be used in the gathering of objective data on three kinds of interaction: interpersonal, small group, and classroom.

F-0842-431 Individual and Group Dynamics**3 sh**

This course is a seminar laboratory experience concerned with the areas of self understanding and effective human relationships. Focus is on individual behavior in groups. Participation in actual group process provides opportunity for development of insight into the effects of one's behavior on others.

F-0842-432 Personal Values**3 sh**

This course is designed to help each participant undertake a personal exploration of his own values, what they are and how he got them, and then consider alternatives open to him.

Prerequisite: 0842-431 Individual and Group Dynamics *suggested* to give participants some insight into forces which affect groups.

**F-0842-550 Advanced Procedures in Group Process
for Special Services Personnel****3 sh**

This is an advanced course for students who have demonstrated an interest in and an aptitude for the group process through the successful completion of 0826-580 Principles of Guidance and Counseling, and 0842-564 Dynamics of Group Process. This course combines theory with experience. It focuses on the examination of systematic approaches for understanding the role of leadership in guidance related groups. Each student must make available the hours of 5-9:30 P.M. on the night the course is offered.

Prerequisites: 0826-580 Principles of Guidance and Counseling;

0842-564 Dynamics of Group Process and approval of Department Chairman.

F-0842-564 Dynamics of Group Process**3 sh**

A laboratory-based course for the development of group skills and understandings. Focus is on experimental learning and personal growth. Readings in human interaction theory will be related to actual group participation.

F-0842-565 Consultation in Organizational Development**3 sh**

A laboratory-based course which focuses on the role of the organizational consultant. Emphasis on planning, providing help and evaluating activities. Diagnostic and behavioral skills to aid individuals and groups within organizations will be developed. Designed for those considering consultation work in business, industry, government, penology, education and community organizations.

Prerequisite: 0842-564 or equivalent, or permission of Department Chairman.

F-0842-566 Field Work in Group Leadership**3 sh**

On-the-job training for group workers to sharpen diagnostic and behavioral skills. Students will join an on-going task centered group either as a member or its leader and will make a problem diagnosis, procedural plan and a method of evaluation. In-progress and final reports will be discussed.

Prerequisite: 0842-564 or equivalent or permission of the Department Chairman.

F-0842-567 Research Seminar in Group Processes**3 sh**

Students develop, carry out and evaluate a research project in small group processes. They work singly or in groups to investigate the application of group work to their major fields of interest.

Prerequisite: 0842-564 Dynamics of Group Process.

F-0842-568 Theoretical Constructs in Social Group Interaction 3 sh

Problems and current practices in small group interaction, social restructuring and cultural encounter. Survey of literature on the influence of interaction on small group behaviors, learning theories, leadership, decision making, social reconstruction, value conflict and perception of self and others.

F-0842-569 Techniques and Exercises in Group Dynamics 3 sh

A structured experiential course: participating in and evaluating activities and exercises of individuals who work with small groups. Students will modify old designs and create new ones as they compile their own ideas, forms and exercises.

Prerequisites: 0842-564 or equivalent and approval of the Department Chairman.

F-0842-570 Introduction to Affect Education 3 sh

In this course the focus is on understanding the affective side of the teaching-learning process and its importance to education in general. Through group participation, each student will begin the development of skills for dealing with feelings in the classroom.

F-0842-662 Group Development Laboratory II 3 sh

Seminar experiences as a core for advanced study in organizational leadership. Group participation and periodic opportunities to examine the problems of a group and the effects of individual behaviors in group development. Methods of applying this experience to the improvement of communication in client organizations.

Prerequisites: 0842-564 or equivalent and approval of Department Chairman.

F-0842-663 Group Laboratory Design 3 sh

This course will focus on the translation of client needs into designs for programs of experiential and cognitive learning opportunities. Students will study models of programs which have been used for colleges, schools, businesses, and other organizations. They will then discuss the theoretical aspects involved and participate in the planning, carrying out, and evaluation of current laboratories, workshops, and conferences.

Prerequisite: 0842-564 Dynamics of Groups Process.

F-0826-563 Social Case Work II 3 sh

This course is a continuation of Social Work I on a more advanced level. It entails critical examination of major social work methods in diagnosis, social functioning and relevant intervention techniques appropriate for the social treatment of individuals.

Prerequisite: 0826-562 Social Case Work I.

F-0826-564 Casework with Children 3 sh

The broad, generic approach will embrace problematic situations, not only within the school setting, but in a variety of areas as well. By means of case studies, special outside lectures, text materials, visits to child-serving agencies, public and private, together with a comprehensive research assignment, the student will become better equipped to deal effectively with especially difficult cases requiring professional sophistication and dedication.

F-0826-571 Peer Counseling 3 sh

An advanced course dealing with the concept and experience of peer counseling. The development, organization, implementation, and evaluation of peer counseling programs and activities. Lectures, seminars, and laboratory experiences. In laboratory, students counsel each other. In seminar, they evaluate their peer counseling activities.



Prerequisites: 0826-580 Principles of Guidance and Counseling;
0842-564 Dynamics of Groups Process or equivalent.

F-0826-572 Self-Critiquing for Improved Counseling Competence 3 sh

Presentation of a theory and system for improving one-to-one counseling through a process of self-critiquing tape recorded interviews of counseling sessions conducted by course participants. Specific counseling behaviors are identified and examined and strategies are developed leading to the attainment of individual behavioral goals.

Prerequisite: 0826-588 Techniques of Interviewing and Counseling or equivalent.

F-0842-550 Advanced Procedures in Group Process for Special Services Personnel 3 sh

This is an advanced course for students who have demonstrated an interest in and an aptitude for the group process through the successful completion of 0826-580 Principles of Guidance and Counseling and 0842-564 Dynamics of Group Process. This course combines theory with experience. It focuses on the examination of systematic approaches for understanding the role of leadership in guidance-related groups. Each student must make available the hours of 5-9:30 P.M. on that night the course is offered.

Prerequisites: 0826-580 Principles of Guidance and Counseling;
0842-564 Dynamics of Group Process and approval of course instructor.

CURRICULUM AND TEACHING

Chairman: Dr. Nicholas Michelli

Graduate Advisor: Dr. Susie B. Boyce

Certification Advisor:

M.A.T. Coordinator: Dr. Catherine Becker

Students with a baccalaureate degree and interest in teaching may earn the Master of Arts in Teaching (MAT) and a Teaching Certificate simultaneously. Curricula for standard teaching fields and special urban programs are available.

The program is open to students with undergraduate background equivalent to a teaching field in one of the following areas: fine arts, business education (bookkeeping and accounting, distributive education, general business education, secretarial studies), English, foreign languages (French, Spanish), home economics, industrial education and technology, mathematics, music, health and/or physical education, science, social sciences, speech and theater. Additional undergraduate course work in the student's teaching field may be required to meet certification standards. Persons holding any New Jersey teaching certificate are not eligible for the MAT program.

Upon successful completion of the program, the student will be recommended to the New Jersey Department of Education for a Teaching Certificate. Although students interested in teaching elsewhere should seek information from the appropriate state authorities, requirements are generally similar.

Admission Requirements

In addition to the general requirements for admission and matriculation for the Master's degree, the applicant must file a separate application to the Teacher Education Program by contacting the Graduate Advisor in the School of Education. Admission to the college cannot be considered admission to Teacher Education.

Criteria considered for admission are:

1. Three recommendations, two of which are from college faculty or school administrators.
2. Verification of demonstrated competence in speech by the Department of Speech and Theater.
3. Cumulative undergraduate grade point average of at least 2.67 and a qualifying score on the aptitude section of the Graduate Record Examination. For those whose native language is other than English, the TOEFL Examination may be substituted.
4. Evidence of active interest in community affairs and teaching.
5. Clearance by the Student Personnel Division. (For MSC BA/BS graduates only).
6. Endorsement of the Teacher Admissions Committee (Departmental and School of Educational and Community Service).

Advisement

Persons interested in the program may secure information from their designated advisors. Upon acceptance, the student will be assigned a School of Education advisor who will cooperatively develop a formal program of course work with a departmental (teaching field) advisor and advise the student continuously. For information about certification in New Jersey, the student may confer with the advisor for certification programs. For further

information on certification, see page 185, under Approved Certification Programs Non-Degree Post-Baccalaureate/Post M.A.

Requirements for the Master of Arts Degree in Teaching

I. Professional Sequence..... 13-15 semester hours

A. Prerequisites

2001-101	General Psychology I, Growth and Development	3
	(undergraduate credit only)	
2001-200	Educational Psychology.....	3
	(undergraduate credit only)	
0808-407	Developmental Reading I	3
0808-408	Developmental Reading II.....	3
0829-410	Field Experiences in Education, or equivalent	1-3

Note: All students must satisfy the course requirement in the Human and Intercultural Relations area. The course to meet this requirement must be selected from the approved list or its equivalent in consultation with the advisor.

B. Required Courses..... 9 semester hours

	Major Department Methods.....	3
0829-0400	Teacher, School and Society*.....	3
	Educational Foundations elective selected from among:	
0821-520	Development of Educational Thought	
0821-521	Contemporary Educational Thought	
0821-540	Social Forces and Education.....	3

*May be taken concurrently with courses in Area V.

II. Education Sequence..... 12 semester hours

A. 0842-564 Dynamics of Group Processes..... 3

and one of the following:

0824-503	Methods of Research	
	or	
0824-504	Action Research for Teachers.....	3

B. School of Education electives..... 6

Graduate courses offered by the School of Educational and Community Services, not specifically designed for preparation or certification in some other areas of education, selected with approval of the departmental advisor.

If, in the opinion of the Dean of the School, the student has essentially achieved the objectives of part of the program, that portion of the requirements may be waived. However, the number of graduate credits may not be reduced below 32, and other requirements of the College still apply.

III. Teaching Discipline Courses

	6-9 semester hours
Graduate courses in the teaching discipline which are covered by the certificate or serve other needs and interests of the students are selected with approval of the departmental advisor.	

IV. Cultural Electives

	3-6 semester hours
With approval of the advisor, the student selects courses outside the School of	

Educational and Community Services and the teaching field, to extend or broaden his general education.

Note: Areas III and IV must total at least 12 credits.

V. Field Experience (Practicum)	10 semester hours
0829-411 Supervised Student Teaching or 0829-4145	8
0829-401 Seminar in Professional Education	1
0829-412 Senior (Community) Field Experience	1

Minimum: 43 semester hours

Notes:

1. These requirements in effect for students matriculated after April 1976.
2. The program requires a comprehensive examination. This requirement may be completed in conjunction with a three credit course (0829-600 MAT Seminar Related Instructional Thought & Practices) designed to prepare candidates for the examination. See Graduate Advisor for information.

CURRICULUM AND TEACHING

Course Descriptions

B-0829-0400 Teacher, School and Society 3 sh

An overview of the field of education, includes a consideration of instructional, curricular, legal and professional issues affecting teachers, schools and society as well as implications for students. Normally part of the professional semester for full-time undergraduate students. Not for graduate credit.

B-0829-0401 Senior Field Experience 1 sh

Part of the Professional Semester. It is designed to provide for experiences in the community in which the student teaches to better understand the place of the school in the community. Placement in professional semester field center. Course only open to student teachers.

B-0829-0402 Seminar in Professional Education 1 sh

Part of the Professional Semester. It provides an opportunity to discuss problems encountered in teaching with peers and supervisors and to find practical solutions to problems experienced. Placement in professional semester field center. Course only open to student teachers.

B-0829-0410 Field Experience in Education (pre-student teaching) 30 hrs.—1 sh; 60 hrs.—2 sh; 90 hours—3 sh

Thirty hours in a public school as assistant to the classroom or subject teacher. Observing, working with individuals and small groups of students, helping with clubs and student activities, teaching 'mini lessons' and becoming familiar with teacher activities. Each student keeps a log of activities. Class meetings on campus. Pass/Fail. Prerequisite: Admission to Teacher Preparation Program. Obtain course application from the SECS Teacher Admissions Office prior to registering for course.

B-0829-0411 Supervised Student Teaching**8 sh**

Student Teaching in the public schools of New Jersey is required of all students who complete the regular program of graduation requirements not for graduate credit. Part of Professional Semester. Not for graduate credit.

**B-0829-0412 Field Work in Urban Education (pre-student teaching) 30 hrs.—1 sh;
60 hrs.—2 sh; 90 hours—3 sh**

Similar to 0829-0410 with emphasis on tutoring and individual conferences in urban public schools. Student keeps a log of activities. Class meetings on campus. Pass/Fail. Prerequisite: Admission to Teacher Preparation Program. Obtain course application from the SECS Teacher Admissions prior to registering for course.

B-0829-0413 Field Work in Community Agencies**30 hrs.—1 sh;****60 hrs.—2 sh; 90 hrs.—3 sh**

Thirty hours of guided experiences in public and private community agencies. Objectives, scope and activities of agencies related to education. Preparation of report as specified on application form and log of activities. Pass/Fail. Class meetings on campus during the experience are arranged.

B-0829-0414 In-Service Supervised Teaching I**4 sh**

Replaces supervised student teaching for those employed in teaching situations without standard certification. Joint supervision by the school district and college personnel. Student must have permission of department chairperson and the school district.

Co-requisite: B-0829-0402.

B-0829-415 In-Service Supervised Teaching II**4 sh**

Continuation of In-Service Supervised Teaching I; the co-requisite seminar is replaced by a series of special in-service conferences included in the course. Not for graduate credit. Prerequisite: 0829-414

B-0829-420 Instructional Innovations**3 sh**

New ways of organizing students, staff, curriculum, time and space, as well as independent study, group dynamics, programmed instruction and student evaluation.

B-0829-521 Seminar: Problems of a Classroom Teacher**1-3 sh**

Reviewing, evaluating and relating teacher aide and student teaching experiences to initial employment as a teacher. Analyzing strengths and weaknesses and making adaptations in techniques and practices. Should be taken concurrently with or immediately after field experience.

B-0829-522 Innovations in Teaching**3 sh**

New media and strategies, novel teaching roles, individualized instructional programs, classroom group dynamics and experimental school organizations. Team teaching utilized where feasible. The student prepares an innovation proposal.

Prerequisite: At least one year of teaching experience.

B-0829-523 Education in the Inner City**3 sh**

The urban school through the eyes of city youngsters, teachers and other educational personnel. Influences of social and economic forces; poverty, family patterns, ghetto mores, urban unrest, emergent minority leadership, school funding patterns, community agencies and school traditions. Evaluation of federal and other projects, innovative teaching and local action. Student prepares a proposal for improvement of an urban school situation.

B-0829-525 Innovative Developments in Education: Contemporary Programs 6 sh

A combination of a survey and in-depth analysis of innovations in the educational realm. The course will focus on the availability of resources and experts in the field. Demonstrations, lab work shops and presentations by people currently involved in innovative programs would be emphasized in addition to the study of numerous innovative areas.

B-0829-530 Principles of Curriculum Development 3 sh

Philosophic, social and economic forces in our society that have determined and will determine the pattern of curriculum in American education in the American public schools from grades K-12. Accepted manner of designing such curricula and professional bodies and individuals who play leading roles in the process of curriculum design. Connection of community interest and power structures in society which are related to the professional decisions.

Prerequisite: One and one-half years teaching experience.

B-0829-531 Curriculum Construction in the Elementary School 3 sh

Reviewing and bringing up to date basic curriculum development concepts; curriculum construction in a modern elementary school; creating an elementary school curriculum in a specific field for one or more grade levels.

Prerequisite: 0829-530.

B-0829-532 Middle School Curriculum and Organization 3 sh

Emerging curriculum of the rapidly developing middle school. Organization of pupils, instruction, media and facilities. Recent social changes and educational innovations; practices in typical middle schools; developing instructional strategies.

Prerequisite: 0829-530.

B-0829-533 Curriculum Construction in the Secondary School 3 sh

Secondary school curriculum and the needs of a changing civilization. Effective means of curriculum construction.

Prerequisite: 0829-530.

B-0829-534 Strategies for Curriculum Change 3 sh

Principles and concepts from sociology, social psychology, educational administration and curriculum applied to education. Opportunity to develop change strategies for particular field settings.

Prerequisite: One and one-half years of successful teaching experience under certification.

B-0829-535 Designing Curriculum for Affective and Humanistic Education 3 sh

The design and implementation of curricular approaches to emotion and process phenomena in the school; evolution, theory and current practice experientially evaluated. Workshops to devise original design models, and simulative and microteaching sessions to demonstrate competence in their application.

Prerequisites: 0829-530, and 2001-200 Educational Psychology.

B-0829-536 Curriculum and Teaching in Career Education Programs 3 sh

Overview of the broad objectives and philosophical bases for career education programs; analyses of selected case studies of career education programs in existence; analysis and evaluation of the process of curriculum development in career education programs;

evaluation of selected resources and instructional strategies used in career education programs.

B-0829-537 The Study of Teaching

3 sh

The teaching process, the varieties of teaching models and metaphors, underlying philosophical considerations and the relationship between teaching and learning outcomes.

Prerequisites: Three years teaching experience.

B-0829-538 Discipline And Group Management In Classrooms

3 sh

To enable teachers to more effectively manage classroom behavioral problems. Classroom management will be examined as distinct from and requisite for effective instruction. Several unified managerial approaches will be studied. The course will culminate with opportunities to practice the selection and application of special managerial techniques to a range of simulated classroom situations.

Prerequisite: Educational Psychology 2001-200.

**B-0829-545 Theory and Practice of Teaching the Bilingual
Child in Content Area**

3 sh

Development of competencies in theory, practice, methodology, and teaching the bilingual student in content areas, i.e., Social Studies, Language Arts, Mathematics and Science. Special emphasis is given to the evaluation of methodology, and to instructional materials available for bilingual students. Attention will also be given to the study of operational programs with (as far as practicable) visitation and observation.

B-0829-546 Education of the Gifted and Talented

3 sh

On the components necessary for planning and implementing a program for gifted and talented students: definition and identification procedures, alternative organization patterns, curriculum design, instructional strategies and materials, teacher selection and program evaluation.

Prerequisite: Educational Psychology. 2001-200.

B-0829-600 MAT Seminar

3 sh

Seminar Course providing in-depth study of selected topics related to current classroom problems based on sound educational theory and practice. The comprehensive examination for the M.A. (major in teaching) will be based on this course.

Prerequisite: Completion of 30 sh in MAT Program.

B-0829-605 Practicum in Teaching

5 sh

The student initiates and completes an independent study project within the fields of curriculum and instruction.

Prerequisite: Approval of advisor.

B-0829-610 Independent Study in Curriculum and Teaching

1-3 sh

An opportunity for practicing teachers to develop and implement curricula under the guidance of curriculum development specialists. Student should discuss proposal with a faculty sponsor in the Department of Curriculum and Teaching and secure permission prior to registration. Especially appropriate for teachers involved in "T&E" planning.

Prerequisite: 0829-530 Principles of Curriculum Development.

B-0829-635 Research Seminar in Curriculum Construction**3 sh**

Individual advanced work in curriculum construction. Admission upon approval of the instructor.

Prerequisites: 0829-530 and 531 or 532 and 533.

EDUCATIONAL FOUNDATIONS

Course Descriptions

Chairman: Dr. Thunder Haas

The Department of Educational Foundations has the dual responsibility of servicing and improving established educational programs while meeting new and critical needs of society through philosophic and sociological theory, comparative study, and administration of new, innovative programs. In keeping with these professional responsibilities, the department offers foundations courses for the preparation of public school educators, and at the same time tries to satisfy specialized demands beyond the limits of the public schools, through electives and alternative graduate programs, such as the M.A.T. in Alternative Community Education.

C-0821-520 Development of Educational Thought

3 sh

Philosophic assumptions behind various educational theories from Classical to Modern schools of thought. Realism, Idealism, and Naturalism; Plato, Aristotle, Epicurus, Locke, Rousseau, Aquinas and others.

C-0821-521 Contemporary Educational Thought

3 sh

Critical evaluations of schools of philosophy which have contributed to educational thought in modern times: Pragmatism, Progressivism, Existentialism, Perennialism, Reconstructionism, and others. Current trends and problems; principles underlying educational theory and practice.

C-0821-522 Pragmatism in Education

3 sh

An intensive study of the doctrines and principles developed in the writings of John Dewey and his followers, with special reference to critical issues in education today. An introduction into pragmatic thought through the writings of Dewey, Pierce, and James, and the implications of this philosophy studied through the works of Kilpatrick, Counts, Bode, Childs, Bramald, and others.

C-0821-523 Existentialism in Education

3 sh

Existential motifs in Sartre, Kierkegaard, Nietzsche, Heidegger, Buber and Camus with emphasis on the implications for educational aims, curricula, methods and values. Works of Morris, Kneller, Greene and Happer, who have begun to define Existentialism for education today.

C-0821-525 Human Values and Education

3 sh

Students examine the different theories of moral development with an emphasis on their philosophical as well as psychological and social dimensions. Conflicting value theories are studied with a view toward consideration of alternative approaches in moral education on the pre-college level.

C-0821-530 Foundations of Bilingual/Bicultural Education

3 sh

Survey and introduction to bilingual schooling in the US with special reference to historical backgrounds; typology and definitions; programs, practices, and staff development; overview of court decisions and legislation affecting bilingual education.

C-0821-532 Interpersonal Relations of Children of Puerto Rican Bilingual/Bicultural Heritage 3 sh

Survey and analysis of interpersonal relations of Puerto Rican children, including examination of cultural life style, psycho-social development, family socialization process and self-identity, and economic situation, to enable the teacher of Hispanic-American students to deal effectively, constructively, and empathetically with them.

C-0821-535 Pluralism in Bilingual Education and American Schools 3 sh

Approaches to cultural and ethnic pluralism are related to specific types of bilingualism in American education. Efforts of various ethnic groups to have children attend public schools and private schools during the same day; bilingual/bicultural approaches related to specific immigrant groups, to their culture and religion, and to the specific social roles they came to play in American society.

Prerequisite: Req. Bilingual Certification.

C-0821-540 Social Forces and Education 3 sh

Examination of various facets of society that have impact on the educational system: economic, political, social, ethnic and religious forces as they relate to problems of educational systems. Field studies included.

C-0821-541 The School as a Social System 3 sh

Analyzes the school as a social system; the relationships between the school and certain external environmental forces.

C-0821-544 Social Class and Education 3 sh

Social, ethnic and racial customs as they relate to class structure and educational values. Traditions of various social groups and their effect on American education.

C-0821-545 Political Forces and Education

Influences of the political structure and the educational system on each other. Specific roles played by education and educational leaders in government bodies at various levels.

C-0821-548 Crucial Issues in American Education 3 sh

A study of the origin, development, and status of very specific crucial issues in the field of education: equal opportunity for education, racial integration, and education; federal aid to education; compensatory education and socio-economic deprivation; affirmative action and civil rights legislation.

C-0821-560 Comparative Studies of Educational Systems 3 sh

An examination of educational institutions and systems in various areas of the world with particular attention given to: the relationship between social structure and types of educational institutions; the conflict between traditional and modern education; the nature of the profession on the secondary and college levels; and student movements for educational change.

C-0821-561 Education in Western Europe 3 sh

Variations in educational thinking and practices in selected countries. Factors influencing educational developments such as political, ideological, socio-economic forces and the relationship between school systems and their cultural contexts.

C-0821-564 Education in Latin America 3 sh

The basic social, economic and cultural structures and how they relate to secondary school and university systems.

C-0821-571 Educational Forces in Correctional Institutions**3 sh**

Historical development of correctional education in the US and the various functions of the present state-county correctional institutions and programs in New Jersey with specific focus on the student populations served, relevant elements of the criminal justice system, institutional classification procedures, and pre-and post-release services available to the offender. Visits to correctional institutions will be scheduled.

C-0821-580 Teaching Philosophy to Children**9 sh****cross-referenced 1509-490**

Skills and background essential for teaching philosophical thinking in the classroom. Teachers will be introduced to the curriculum materials in philosophy for children as well as the history of philosophical ideas which form an essential component of the approach. (This course will not count toward the undergraduate major in Philosophy).

EDUCATIONAL LEADERSHIP

Chairman: Dr. Anne C. Castens

Graduate Advisors:

Educational Leadership:

Dr. Lawrence Bellagamba

Dr. Anne Castens, Mr. William Cuff

Dr. Frank Merlo, Dr. David Weischadle

Reading:

Dr. Joseph Brunner, Dr. Maria Schantz

Research and Evaluation:

Dr. Gerhard Lang

Media and Technology in Education:

Dr. Grosvenor Rust

Educational leadership, working with other departments of the College and the School, prepares educational leaders in the broadest sense. Programs of graduate study leading to the Master of Arts in Administration and/or Supervision, Reading, and to post-M.A. studies, are offered. In addition, the department offers courses at the graduate level in educational research and evaluation, media and technology in education, and reading.

Although the graduate programs are directed toward certification as Supervisor, Principal, School Administrator, Business Administrator, Reading Specialist or Media Specialist, a comprehensive study of the field of educational leadership is encouraged.

Certification programs are also available to those holding M.A. degrees in a subject area and desiring certification as supervisors or administrators.

Three years of successful teaching experience under certification are required for certification as supervisor or administrator.

Our programs provide solid scholastic foundations in the multi-faceted purposes of education in a democratic society. They combine study with close observation and practice in various communities and agencies. The graduate programs in the department prepare students for positions as:

1. major administrative or supervisory personnel at all levels of educational systems.
2. educational managers and planners in the media fields. (e.g. media specialist)
3. reading specialists or consultants.
4. educational researchers, evaluators and testing specialists.

Our effort is to select candidates carefully and lead them to be able to:

1. develop a personal philosophy of education and social ethic consistent with related theories of learning and human development.
2. develop characteristics required for effective leadership in education.
3. analyze educational organizations, and plan programs and strategies for increasing organizational effectiveness.
4. develop techniques to facilitate interpersonal and group problem solving and decision making.
5. develop skills in managing change and conflict in educational endeavors.
6. interpret research findings and design and implement research techniques to their organizational needs.

Requirements for the Master of Arts Degree in Administration and Supervision

Admission Requirements

In addition to the admission requirements for graduate study at Montclair State College students wishing to matriculate into the Master of Arts program in administration and supervision in the Department of Educational Leadership must first complete requirements listed in Phase I of the program or be enrolled in the last course in Phase I.

Admission to Phase I (pre-matriculation) requires:

- 1. A valid teaching certificate issued by a State Department of Education.
- 2. One and one-half years of successful teaching experience under contract or other employment judged as suitable educational experience by the department.

Students who wish to move from Phase I (pre-matriculation phase) to full matriculation in the program must make application to the Department of Educational Leadership.

The process leading to full matriculation includes:

- 1. A departmental interview
- 2. A matriculation examination scheduled at the time of the matriculation interview
- 3. An updated statement of personal goals written at the time of the matriculation interview

Other requirements for full matriculation include:

- 1. Successful completion of Phase I requirements (or completing last course).
- 2. Two years of successful teaching experience under contract
- 3. Recommendations from three educational leaders familiar with the professional work of the candidate. One recommendation must be from an instructor in Phase I.
- 4. Competency in written and spoken English as determined by the matriculation interview and the updated statement of goals.
- 5. Personal characteristics of leadership.

A student must apply for pre-matriculation before completing six semester hours of course work in Phase I of the Administration and Supervision program in the Department of Educational Leadership in order to determine the student's eligibility for the program.

Transfer students wishing to have recognized prior course work which has been taken at another accredited institution must take at least two Phase I courses at Montclair State College within the last five years before matriculation.

In summation, final action on matriculation is based on requirements of the Office of Graduate Studies and of the department and any special individual requirements assigned to the student by the Educational Leadership faculty.

Program Requirements

I.	Phase I Requirements	12 semester hours
	0824-503 Methods of Research.....	3
	A graduate course offered in the social and behavioral sciences, humanities, approved by advisor	3
	0827-510 Educational Administration I	3
	0842-564 Dynamics of Group Process or the successful completion	

of a course in group dynamics at the graduate level of any accredited college, or by participation in a Human Relations Laboratory of at least one week's duration conducted by an accredited institution. 3

- II. Phase II Requirements 9 semester hours
 0829-530 Principles of Curriculum Development. 3
 0827-540 Supervision I (Principles) 3
 Elective approved by advisor 3

- III. Phase III Requirements 12-21 semester hours
 0827-615 Field Experience in Administration and Supervision. 3

Electives to be selected after consultation with the advisor, and listed in the Master of Arts work program. They may be selected to satisfy certification requirements. Certain courses outside the School may be selected. A concentration in Media or Educational Research and Evaluation is possible with Supervisor's Program.

- IV. Comprehensive Examination

Minimum: 33-36 semester hours

ADVANCED GRADUATE STUDY IN ADMINISTRATION AND SUPERVISION

Students holding a Master of Arts degree and New Jersey certificate for Principal, who wish to continue planned graduate study of thirty additional semester hours will be required to meet all matriculation requirements for admission to the Master of Arts program in Administration and Supervision, and make a satisfactory grade on a comprehensive examination covering the field. Such a thirty hour program will need to be approved by a faculty advisor so as to meet the professional goals of the student, including certification for Administrator (Superintendent of Schools) in New Jersey.

Requirements for the Master of Arts Degree in Reading

Admission Requirements

Provision is made in this program to matriculate students who have demonstrated interest and ability suitable to reading education. Applicants shall furnish acceptable evidence of talent appropriate for competence in reading instruction. Letters of recommendation from the school system superintendent or the school building principal will be acceptable. Final matriculation is the departmental decision; prerequisites will be determined by departmental advisement.

Program Requirements

- I. Basic Professional Education 6 semester hours
 0824-503 Methods of Research (required) 3
 Elective in School of Educational and Community Services 3

- II. Required Courses in Reading 12 semester hours
 - 0808-500 The Nature of Reading 3
 - 0808-511 Case Studies of Reading Difficulties 3
 - 0808-513 Corrective and Remedial Reading I 3
(written permission required)
 - 0808-505 Research Seminar in Reading 3
(written permission required)
- III. Elective Courses in Reading 6 semester hours
Students must take additional reading electives in order to meet specialization requirements.
 - 0808-501 Techniques of Reading Improvement in Secondary Schools 3
 - 0808-502 Administration and Supervision of Reading Programs 3
 - 0808-503 Literature for Adolescents 3
 - 0808-504 Reading Needs of Adult Learners 3
 - 0808-506 Reading Resources 3
 - 0808-509 Teaching of Communication Skills 3
(Open to M.A.T. and certification students only)
 - 0808-510 Field Experience in Reading 3
 - 0808-512 Seminar in Reading Difficulties 3
 - 0808-514 Corrective and Remedial Reading II 3
Recommended (written permission required)
- IV. Free Electives 6 semester hours
Any graduate courses offered by the College
- V. Additional Department Requirements
 - A. Supervised clinical experience within the framework of required courses and/or in addition to course work. Arrangements will be made to provide this experience in the Montclair State College Reading Center.
 - B. A written comprehensive examination, supplemented if necessary by an oral examination, or an equivalent comprehensive experience determined by the Department.
 - C. A reading portfolio containing representative work and personal contributions in reading will be compiled by the student. This portfolio will be used to diagnose students' strengths and weaknesses as they progress through the program.

Minimum: 33 semester hours

In March 1976, the New Jersey Board of Education passed a proposal for a six-semester hour or two-course requirement in the teaching of reading as it pertains to the field for which certification is being sought. This requirement became effective September 1977. Courses will be available through the Reading Program in the School of Educational and Community Services.

Students seeking teacher certification, therefore, must complete the following reading courses prior to filing for certification:

- 0808-407 Developmental Reading: Principles and Techniques Part I 3
- 0808-408 Developmental Reading: Principles and Techniques Part II 3

PROGRAM LEADING TO THE READING SPECIALIST CERTIFICATE

Minimum Requirements: Initial teaching certificate, two years of teaching experience, and a program of 30 hours of study. See advisors for further information.

EDUCATIONAL LEADERSHIP

Course Descriptions

Administration and Supervision

- D-0827-510 Educational Administration I** **3 sh**
 Nature and dynamics of organizations from the viewpoints of social and behavioral sciences. Leadership, decision-making, conflict resolution and other theories considered in the educational setting. Impact of environmental and personal forces on organizational behavior.
 Prerequisite: One and one-half years of successful teaching under certification.
- D-0827-511 Educational Administration II** **3 sh**
 Processes and findings of organization science applied to educational problems. Frameworks for instruction, personnel, finance, facilities, service and public participation at the school district level. Emphasizes issues, trends and contemporary problems.
 Prerequisite: Educational Administration I 0827-510.
- D-0827-512 Administration of Elementary Schools** **3 sh**
 Educational leadership required for effective elementary school organization and administration. Changing role of the principal, his relationships with staff and students and current principles, practices and techniques with regard to scheduling, staff utilization, plant operation, student activities, and school community relations.
 Prerequisite: Educational Administration I 0827-510.
- D-0827-513 Secondary School Administration** **3 sh**
 Special administration problems of the junior and senior high school. Recruitment of staff; scheduling of teachers and students; department organization and school morale. Recent experiments of organization structure. Supervision of instruction as a major function of administration. Current demands of adults in the community. How the secondary school operates in relation to the elementary school and higher education to help design education as a continuous process. Students write a paper on a special administrative problem.
 Prerequisite: 0827-510.
- D-0827-514 Vocational School Administration** **3 sh**
 Characteristics, needs, problems and organizational patterns of vocational schools. Experience, procedures, practices for appraising programs and individual achievement. Identification and assessment of current issues and trends in technical and vocational education as an integral part of the total school program.
 Prerequisite: 0827-510.
- D-0827-521 Education Law** **3 sh**
 Legal theory, practical politics, relationship of school district organization to other units of

government, appellate function of the State Commissioner of Education and the State Board of Education, New Jersey school laws (Title 18A of the Revised Statutes) and Rules and Regulations of the State Board of Education and their decisions. New Jersey School legal structure compared with that of other states.

D-0827-523 School Plant Planning

3 sh

The relationship between educational facilities and educational programs. Site selection, development of educational specifications, the physical environment, selection of equipment, programming of various facilities based on curricula and community needs. Group visits to exemplary educational facilities.

D-0827-526 School Business Administration

3 sh

Role of school business administration in the public school. Various functions, structures and techniques of operation. Simulation techniques utilized to construct both a traditional and PPBS budget.

Prerequisite: 0827-510.

D-0827-540 Supervision I

3 sh

School personnel as principals, coordinators and department and subject area supervisors in elementary and secondary schools. Contribution of supervisors in instruction in supporting the professional work of classroom teachers.

Prerequisites: Two years of teaching experience, 0827-510.

D-0827-541 Supervision II

3 sh

Applies theories of supervision to practical situations in elementary and secondary schools. Sharp focus on improving the teaching skills of colleagues. Critical analysis and improvement of local teacher evaluation procedures. Consideration of the impact of contemporary educational issues on school improvement and in-service education. Preparation of professional documents. Course modified in terms of student's needs.

Prerequisite: 0827-540 or its equivalent and 0827-510.

**D-0827-560 Workshop Seminar in Higher Education:
The American College**

3 sh

Overview of structure and functioning. History, philosophy, sociology and politics of the college as a unique and dynamic institution in American society: educational opportunity and the organization of higher education; open admissions; status, trends and implications; minority group youth in higher education; student initiatives for reform; faculty governance; etc.

D-0827-565 The Two-Year Junior College

3 sh

History, purpose, patterns and trends of the two-year college, including the junior college, the community college and university extension centers.

D-0827-610 Theory and Research in Administration

3 sh

Applies organization science to individual problems in educational administration. Experiences in the internship of field experience are given scholarly analysis.

D-0827-611 Advanced Seminar on Educational Issues

3 sh

Final integrating experience in the leadership program. Implications for educational administration of major contemporary issues and trends.

Prerequisite: Permission of graduate advisor.

D-0827-615 Supervised Field Experience in Administration and Supervision 3-6 sh

Students are assigned work within an educational agency, operating at the level and in the domain of their professional specialty. They work under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the college supervisor. This experience is not to be construed as an "internship," as it will not encompass the total job description of the administrator. A written report on the activity or research paper will be approved by the administrator and presented to the college supervisor, who will evaluate the total experience.

Prerequisite: Permission of a graduate advisor.

D-0827-616 Internship in Educational Administration 6 sh

Full semester assignment of guided work within an educational institution's administrative office. Sixth year students are eligible to choose this internship plan, but it is advised that arrangements be made for released time, at least one half time, if the internship is to be carried on in an institution where student is employed. The experience is planned to include a wide variety of administrative experiences such as locating and interviewing candidates for positions, scheduling, in-service professional development, special committee leadership, projects that influence curriculum building arrangements and budgets. The sixth year student may be required to take 0827-610 or 0827-611 for three additional semester hours during this internship. In all cases, he will complete his research project as a part of his internship assignments. (Open only to Post-Master Study.)

Prerequisite: Permission of advisor.

D-0827-618 Independent Study in Educational Administration and Supervision 1-3 sh

Individual pursuit of a research topic in the area of educational administration or supervision under the direction of a departmental (A and S) faculty member culminating in a written document of scholarly proportion and integrity. Arrangements for this course should be made with department chairman or adviser.

Prerequisites: Open only to advanced matriculated students in programs with permission of department (A and S).

D-0827-620 Systems Analysis in Education 3 sh

Latest techniques in operations research for educational purposes. Systems analysis techniques studied and utilized by student in an instructional, curriculum or administrative mode. Simulation techniques in classroom-oriented activities.

Prerequisites: 0827-510 and 0829-530.

D-0827-622 School Finance 3 sh

Current economic environment; state, local and federal taxation; state school aid theory and practice; school district indebtedness; statutory school budget and fiscal controls; various cost-quality instruments and role of school fiscal structure in relation to local, state and federal governments.

Prerequisites: 0827-510; 0827-521.

D-0827-623 Advanced School Plant Planning 3 sh

Advanced course in school plant enables student to plan an innovative educational facility. Independent (contract) study approach, coupled with scheduled critiques with professor is main method of instruction.

Prerequisites: A course in school plant planning and 0827-510.

D-0827-625 School Plant Maintenance and Operation**3 sh**

Latest techniques in the maintenance and operation of the school plant. Various specialists in specific areas of study utilized in the instructional program. Determination of work loads, formulation of job descriptions, supply storage, care of mechanical and hand tools and equipment and care of the school site. (Not offered every year.)

Prerequisite: 0827-510.

D-0827-643 Staff Personnel Administration**3 sh**

Personnel practices and problems in current school situations. Roles of policy-making bodies, the public, professionals, para-professionals and general staff in effective communication for the optimum use of human resources. Problems relate to such areas as recruitment, selection, retention and evaluation of staff.

Prerequisites: 0827-510 and 0827-540.

D-0827-670 Selected Topics in Educational Administration/Supervision**1-3 sh**

Emphasis on in-service education for practicing administrators and/or supervisors. Topics will vary in accordance with needs, concerns, or requests of school districts or professional organizations desiring service. Current problems are given priority. Credits to be dependent upon number of hours workshops and/or seminars are in session.

Prerequisite: Participants are to be practicing administrators and/or supervisors.

Reading

D-0808-407 Developmental Reading: Principles and Techniques I**3 sh**

For classroom and non-classroom personnel whose major responsibility is instructing students. Developing those skills, understanding and competencies in the nature of the reading process, specific word recognition and comprehension, classroom diagnostic techniques.

D-0808-408 Developmental Reading: Principles and Techniques II**3 sh**

Enables content area teachers to understand the developmental nature of the reading process and employ specific techniques to facilitate and improve reading competencies.

Prerequisite: 0808-407.

D-0808-500 The Nature of Reading**3 sh**

The foundations of reading: the nature of the reading process, readiness, beginning instruction, current practices in the teaching of reading in early childhood and elementary education, a reappraisal of the role of reading in a technological society.

D-0808-501 Techniques of Reading Improvements in the Secondary School**3 sh**

The improvement of non-clinical reading difficulties in the content subjects. For the subject area teacher and the beginning reading specialist. Secondary school reading needs, and specific suggestions for guiding the slow, average and gifted student in a classroom situation.

D-0808-502 Administration and Supervision of Reading Programs**3 sh**

The more complex aspects of organizing and administering reading programs: theory and techniques of leadership, program development, organization of in-service programs; developing a budget, methods of evaluation, etc. Essential background for reading specialists to establish or administer a functional school reading program.

D-0808-503 Literature for Adolescents**3 sh**

Background for the development of recreational reading programs in junior and senior high schools. Literature written for students, as well as literature intended for adults but read widely by adolescents. Criteria for book selection, censorship, role of mass media, minority group identification through books, bibliotherapy, bibliography, and the importance of the librarian.

D-0808-504 Reading Needs of the Adult Learner**3 sh**

For teachers of out-of-school youth and adults: language learning and related psychological factors; methodology and reading instruction; literature and the reading program and innovations in reading instruction.

D-0808-505 Research Seminar in Reading**3 sh**

Problems in the field of reading suggested by: educational events and trends; members of the class; and educational movements in New Jersey, the country and the world. Each student will execute and report an individual research effort. Written permission required.

D-0808-506 Reading Resources**3 sh**

Software, hardware, multi-media and multi-sensory materials available in the schools and in adjunct facilities; philosophic, psychological and academic considerations of reading resources. Video tape demonstrations of materials.

D-0808-509 The Teaching of Communication Skills**3 sh**

Abilities, limitations and needs of students in speaking, listening, reading and writing. Adaptations in curricula, assignments and procedures to the levels of students in a classroom; remedial measures. Speech, reading and English instructors involved in course. Open to M.A.T. and certification students only.

D-0808-510 Field Experience in Reading**3 sh**

Agencies and programs dealing with reading. Students observe, participate and report activities of the agencies. For students in long-range research with limited teaching experience, who need additional field and clinical experience. Independent study. Prerequisite: Permission of the advisor to the M.A. program in Reading.

D-0808-511 Case of Reading Difficulties**3 sh**

Techniques for diagnosing reading difficulties; the most frequently used tests and inventories; the actual testing of a child with reading problems. Group and individual tests, survey and diagnostic tests, and standardized and informal tests: reporting to parents, schools and agencies.

Prerequisites: 0808-500 and permission of the instructor.
Additional diagnostic hours will be arranged.

D-0808-512 Seminar in Reading Disabilities**3 sh**

Significant problems in the field of reading disability; historical and emerging models used in reading diagnosis.

D-0808-513 Corrective and Remedial Reading: Part I**3 sh****D-0808-514 Corrective and Remedial Reading: Part II****3 sh**

For advanced students and specialists involved in some aspect of remedial instruction. Part I: Investigation and interpretation of serious reading problems; causes of reading difficulties; techniques of remedial and corrective treatment. Part II: Selection and adapta-

tion of suitable improvement devices, materials and ideas; intensive treatment in a practicum situation. Clients are drawn for the classes in the Reading Laboratory. Additional tutoring hours will be arranged.

Prerequisite: Written permission of the instructor required.

Educational Research and Evaluation

D-0824-503 Methods of Research

3 sh

The theory and methods of historical, descriptive and experimental research: formulation of a research problem; use of bibliographical sources and reference materials; statistics and measurement in research; types and instruments of research; data collection and analysis; writing the research report and career opportunities in research.

D-0824-504 Action Research for Teachers

3 sh

Principles and techniques of research applicable to classroom situations. Various kinds of classroom research are studied and analyzed. Practice provided in planning and outlining a research project, the development of experimental designs and evaluation of the structure and outcomes of classroom research. Open to M.A.T. and certification students only.

D-0824-505 Interpretation and Application of Educational Research

3 sh

Provides an understanding of research studies dealing with current issues in education. Representative research and evaluation studies will be critically analyzed.
Prerequisite: A course in Statistics.

D-0824-507 Measurement and Evaluation: Cognitive Domain

3 sh

Theory and practice to develop comprehension of and skill in constructing tests in the cognitive domain, such as intelligence, achievement and aptitude tests. Basic measurement concepts relating to test construction. Each student will carry out a project geared to his/her needs.

Prerequisite: A basic course in descriptive statistics.

D-0824-508 Measurement and Evaluation: Affective Domain

3 sh

Theory and practice to develop comprehension of and skill in constructing tests in the affective domain, such as opinionnaires, interest tests, self concept tests, personality inventories, and attitude scales. Basic measurement concepts relating to test construction. Each student will carry out a project geared to his/her needs.

Prerequisite: A basic course in descriptive statistics.

D-0824-578 Testing and Evaluation

3 sh

Principles and practices of educational and psychological testing and evaluation relevant to professionals in human services, communication sciences and disorders, education, and related fields. Historical/philosophical orientation; place of testing in instructional and remedial programs; statistical concepts underlying measurement; validity, reliability, response set; construction of tests and measurement instruments; evaluation and interpretation of testing data; use and misuse of testing data; reporting data to students, parents and colleagues; critical analyses of selected standardized intelligence, ability and personality tests; experimental tests and measurement instruments. Course project geared to individual student needs.

D-0824-580 Pupil Learning: Process and Measurement 3 sh
(Partial Implementation of a State System of
Thorough and Efficient Education)

Study of the learning process and its measurement as it applies to the classroom, the school, and the school district, for instructional and administrative school personnel. Design, implementation and appraisal of the instructional aspects of the New Jersey Administrative Code (Title 6-Education) and the New Jersey Statutes (Title 18a-Education) ("Thorough and Efficient Education").

D-0824-603 Seminar in Research 3 sh

Opportunity to carry out a research project—historical, descriptive or experimental in nature—culminating in a written report.

Prerequisite: 0824-503 or equivalent.

D-0824-630 Evaluation of Educational Programs and Personnel 3 sh

Problems, issues and procedures involved in designing and carrying on evaluation studies dealing with institutions, programs, curricula and personnel performance. Students will undertake an evaluation project and write a project report. Course content and requirements will be geared to individual needs of students.

D-0824-650 Independent Study in Educational Research and Evaluation 1-3 sh

Designed for individuals who, in consultation with advisor, wish to undertake an in-depth analysis of a specific problem.

Prerequisite: Permission of the faculty advisor is required.

Technology in Education

The Instructional Media Courses offered below are available as a sequence of study to meet the educational media specialist certification requirements. Persons wishing to prepare for one of the two certificates should arrange for a conference with the proper advisor.

A Master's Degree and either a standard New Jersey teacher's certificate or an Associate Educational Media Certificate are required as prerequisites to the issuing of the Educational Media Specialist Certificate. A Bachelor's Degree and a standard New Jersey teacher's certificate are required as prerequisites to the issuing of the Associate Educational Media Specialist Certificate. Course descriptions for the related undergraduate program leading to this last certificate are provided in the undergraduate catalog.

D-0841-500 Instructional Technology in Curriculum 3 sh
Implementation and Design

The organizing and integrating of media in school curricula and other educational programs. Identifying instructional purposes and defining roles for technology and media in learning and teaching. Examining and comparing curriculum designs for their concordance with the procedures of technology in education. Selection and evaluation of materials.

D-0841-520 Production of Materials for Media Technology 3 sh

For developing advanced proficiency in preparing audio, photographic and graphic materials. Especially for persons charged with materials preparation in media centers. Laboratory instruction.

D-0841-521 Design of Innovative Curriculum Resources**3 sh**

Emphasizes systems design, software, program development, creative development of media for special learning situations, basic design of programmed instruction and multi-media techniques.

Prerequisites: Completion of 0520 or concurrent enrollment in 0520.

D-0841-525 Photographic Communication in Education**3 sh**

Offered for the development of competency with the photographic processes and equipment commonly used in producing educational media. Extensive laboratory and camera work required. Emphasis is on proficient creativity for instruction utilization.

Prerequisite: Photography.

D-0841-540 Television Production in Education**3 sh**

Laboratory and seminar in television studio production. Camera operation, principles of lighting, sound, elements of set design, functions of floor director, control room operations and basic television directing.

D-0841-541 Television Programming in Education**3 sh**

Combination lecture, laboratory and seminar in programming, conceptual creativity, pre-planning, execution of ideas and evaluation of presentations. Selection and design of hardware.

Prerequisite: Completion of 0841-440 Television in Education Workshop or permission of instructor.

D-0841-550 Administration and Supervision of Technology in Education**3 sh**

Provides training for management and supervision of integrated instructional resources programs. Emphasis is on the practical day-to-day problems of control, production, acquisition, utilization, finance staffing, organization and evaluation for the provision of media and technology in educational enterprises. Additional attention is given to community relationships and special services.

D-0841-610 Research and Development Seminar in Instructional Technology and Resources**3 sh**

A practicum on application of research findings to the design and utilization of instructional media and resources. Emphasis is on extraction of practice from theory and research findings.

Prerequisite: 0824-503 Methods of Research or equivalent.

D-0841-615 Supervised Field Experience for Educational Media Certification**3 sh**

Students are assigned work within an educational media center, operating at the level and in the domain of their professional specialty. They work under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the college supervisor. This experience is not to be construed as an "internship," as it will not encompass the total job description of the media specialist. A written report on the activity will be approved by the administrator and presented to the college supervisor, who will evaluate the total experience.

The following Senior-Graduate level courses are open to graduate students pursuing certification under the 1974 media certification act. Approval of graduate advisor is required for inclusion in a program of study.

1601-401	Fundamentals of Cataloging and Classification	3
1601-402	Reference and Bibliography for School Resource Centers	3
1601-403	Reading Materials for Children and Youth: Selection and Evaluation	4
0841-420	Teaching Materials Workshop	3
0841-430	Television Services in a Single School Media Program	3
0841-445	Audio Technology in Education	3



SCHOOL OF FINE AND PERFORMING ARTS

Donald M. Mintz, Ph.D., Dean

The School of Fine and Performing Arts consists of the departments of fine arts, music, and speech and theater. Each offers preparation for careers in its disciplines, in public school teaching, and in related fields. Details can be found in each department's statement.

Separately and together, the departments offer courses that recognize significant contemporary developments: the increased role of technology in artistic enterprise, the growth of film and television as artistic media, the tendency toward blurring of the boundaries between conventional artistic disciplines, and serious challenges to traditional notions of what art is. The several degree programs and concentrations share an emphasis on artistic skill and imagination and the conviction that the arts are part of intellectual life. They believe that in the last analysis students with varying backgrounds and differing career plans can best be served by advanced programs designed to help them become better artists and better thinkers about art.

FINE ARTS

Graduate Advisor: Dr. Peter Barnet
Department Chairman: Professor William McCreath

The graduate program in fine arts is designed to provide the committed artist, art teacher, art historian, or advanced layman with the opportunity to acquire further knowledge, skills and in-depth experience. The program allows for concentration in the area of the student's choice. Areas of specialization are offered in art education, art history, studies in the visual arts, and studio areas of painting, sculpture, graphics, crafts, photography and cinematography.

Studio courses are advanced courses and may be taken only with departmental permission. Although experience in the particular medium of the course is not required, a strong art background is necessary for success. Art history and philosophy courses are open to non-art majors.

Admission Requirements

The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.

Matriculation requires completion of a minimum of 36 semester hours in fine arts, including history and studio courses, or equivalent art studies at recognized institutions.

A portfolio of representative art work will be required as evidence of the applicant's ability. Advice concerning this requirement may be obtained from the department's graduate advisor.

The department may require one or more specified probationary courses prior to matriculation.

Requirements for the Master of Arts Degree in Fine Arts

- I. Required Courses..... 6 semester hours
- Graduate Art History..... 6

- II. Basic Professional Education 6-9 semester hours
For Art Education majors
 - III. Art Electives 10-16 semesters
To be selected with approval of the Graduate Advisor
 - IV. Free Electives 6-8 semester hours
 - V. Graduate Project or Thesis. 4 semester hours
The candidate must elect one of the following
 - A. Graduate Project
 - 1001-603 Seminar in Art I 2
 - 1001-604 Seminar in Art II. 2
 - B. Master's Thesis 1001-600 4
 - VI. Final oral examination in relation to Graduate Project
- Minimum: 32 semester hours

FINE ARTS

Course Descriptions

G-0831-501 Contemporary Viewpoints in Art Education **3 sh**
The literature of the foundations of art education; readings selected from philosophy, the social and behavioral sciences, and the history of art education; implications of the developments in science and technology.

G-0831-502 Advanced Curriculum Construction in Art Education **3 sh**
For students with interest in curriculum construction or revision, both in the elementary and secondary programs; evaluation of curricular materials in use in New Jersey and throughout the country in terms of principles of curriculum construction.

G-0831-505 Supervision and Evaluation in Art Education **3 sh**
Supervisory methods and techniques for the experienced art teacher. Current and analogous supervisory data will be included. Will be based on state criteria and ways of evaluating from creative viewpoints.
Prerequisite: 3 years of teaching art.

G-0831-506 Studio Techniques in Art Therapy **3 sh**
The development of a repertoire of art therapy skills in various media to facilitate meeting the expressive needs in art therapy settings.
Prerequisite: Acceptance into art therapy concentration.

G-1001-515, 516, 517, 518 Graduate Life Drawing I, II, III, IV. **2 to 3 sh**
Advanced problems in drawing based upon a study of the human figure.
Prerequisite: Eligibility for graduate program in fine arts.

G-1001-600 Master's Thesis I
A serious research project in art.
Prerequisite: Permission of the department.

G-1001-603, 604 Seminar in Art (with graduate project) I, II. 2 sh each

An opportunity to make an extensive study in the field of art through the Fall and Spring semesters. The student examines and defines a problem and explores it in increasing depth and significance. The project may be a written document or a studio project. Students are advised to initiate these projects after completing at least two courses on a graduate level in the area of the project, and no more than 12 to 16 credits in their general program. Approval for 604 should be secured in the Spring and Summer session preceding Fall registration for the course. Approval is gained from:

- 1) the instructor as to competence in the medium, or background preparation.
- 2) a faculty member who will serve as personal advisor throughout the project.
- 3) the departmental graduate advisor who will conduct the 603, 604 seminar.

G-1001-611, 612 Individual Study I & II 2-8 sh each

Under this course designation advanced students may either expand or extend their experience in a chosen field or medium. Direction, conduct and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium. Departmental permission; credits to be arranged.

G-1001-620, 621 Field Course in Art I & II 2-6 sh each

Travel courses to art sources in the United States and foreign countries not to exceed 6 graduate credits. First-hand contact with the historic art forms of the places visited and with artists and craftsmen. Each student selects an area of study in which the places visited have rich art resources. As preparation for the course, the student outlines a chosen study problem, reads background material, and lists sources he/she expects to utilize.

G-1002-511, 512, 513, 514 Graduate Painting I, II, III, IV 3 sh each

Studio in painting to further the creative expression and technical knowledge of the student in various painting media; personal and professional development through studio work, trips and the study of the contemporary artists.

Graduate prerequisites and permission of department.

G-1002-521, 522, 523, 524 Graduate Sculpture I, II, III, IV 2 to 3 sh

The student explores independently one or two materials and techniques, and begins to find directions as a sculptor.

Graduate prerequisites and permission of department.

G-1002-554, 555 Graduate Relief Printing I & II 2 to 3 sh

This course explores the fine art of woodcut and wood engraving from the master image to final production involving tools, inks, papers, rollers, image application and correction, color registration and printing approaches. Other contemporary relief methods are experienced, such as: the cellocut, linocut, hand embossed print, collage relief print, cardboard relief print, masonite relief print, gesso or plaster print, stamped print, glue, and other improvised multi-media prints. For art majors or by departmental permission. 1002-555 prerequisite: 1002-554.

G-1002-556, 557 Graduate Lithography I, II 2 to 3 sh

From design and execution of master drawing to the finished print; first hand knowledge

of tools, materials and techniques of the lithographic process; adaptation of the lithographic phase of printmaking to classroom use.

Graduate prerequisites and permission of the department.

G-1002-558, 559 Graduate Lettering I, II **2 to 3 sh**

Styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display and advertising layout; brief introduction to typography.

Graduate prerequisites and permission of the department.

G-1002-560, 561 Graduate Graphic Design I, II **2 to 3 sh**

Techniques and principles of design of printed matter and displays, elements of layout, illustration, typography, printing process, and preparation of copy for the printer.

Graduate prerequisites and permission of the department.

G-1002-574 Graduate Relief Printing III **2 sh**

A continuation of 1002-555. It affords opportunities for in-depth and serious involvement which is built on the learnings, proficiency, and development initiated in 1002-554 and 1002-555.

For art majors or by department permission.

G-1002-575 Graduate Relief Printing IV **2 sh**

A continuation of 1002-574. This course is for the advanced student who is evolving artistically as a serious printmaker—It affords additional opportunities for the individual who is developing procedural techniques and background experience for a studio thesis project.

For Art majors or by departmental permission.

G-1002-590 Modern Philosophies of Art I **3 sh**

Major writers in art in the nineteenth and twentieth centuries; the nature of the creative experience; art in the life of the individual and society; the creative process; new materials; institutions and sentiments affecting current thinking in the field. Discussions based on readings of philosophers, poets, social scientists and psychologists.

Fine arts major only, or permission of instructor.

G-1003-591 Modern Philosophies of Art II **3 sh**

The writings of 19th and 20th century artists and their interpreters; such works as the "Futurist's Manifesto" and Kandinsky's "The Spiritual in Art."

Fine arts major only, or permission of instructor.

G-1003-592, 593 Selected Problems in Art History I, II **3 sh each**

Art problems, iconographic topics and themes of a historic, social and philosophical nature. Topic selection will depend upon the special areas of the professor or guest professor invited for the semester.

G-1003-594 Northern Renaissance Art **3 sh**

15th and 16th century paintings in northern Europe especially Flanders and Holland; the development of realism and style in relation to social change and the general ideas of the period, including contemporary music; Jan Van Eyck, Van der Weyden, Bosch, Peter Breughel and Matthias Grunewald.

G-1010-505 The Film as a Visual Art **3 sh**

An understanding of the development of the motion picture as an art form. Viewing,

analysis, reading, and/or actual participation in the production of film images. May be repeated for credit.

Prerequisite: Graduate standing.

G-1010-580, 581, 582, 583 Graduate Cinematography I, II, III, IV 3 sh each

Techniques, materials and theories of motion picture production for visually experienced students.

Prerequisite: Major or minor in fine arts or related area, or permission of instructor.

G-1011-570 Graduate Photography I: A Contemporary Art Form 3 sh

Provides for the in-depth study and practice of photography as a visual language. Encourages exploration beyond the camera through studio work, discussions, criticism, films, trips and demonstrations.

Prerequisite: 10 sh in Art.

G-1011-571 Graduate Intermediate Photography: A Contemporary Art Form 3 sh

Workshop, discussion, lectures, criticism, demonstrations: Photography for self expression and greater visual awareness. Creative controls, craftsmanship, perception, presentation and the fine points will be investigated.

Prerequisite: 1011-570.

G-1011-572 Graduate Advanced Photography: A Contemporary Art Form 4 sh

Workshop, discussion, lecture, demonstrations, criticism. Photography as an intensive learning experience. Light sensitive materials, controls, photographic approach, selection, zinc system and view camera will be investigated.

Prerequisite: 1011-571.

G-1011-573 Graduate Special Processes in Photography 4 sh

Investigation of non-traditional light sensitive materials for use in the photographic image making process. It extends traditional boundaries of photography through new tools that permit greater image manipulation: gum bichromate, cyanotype, platinum, photo etching, and others will be investigated.

Prerequisite: 1011-572.

G-1090-525, 526 Graduate Metalwork and Jewelry I, II, III, IV 2 to 3 sh

Designing jewelry and small sculpture in varied metals; the techniques of flat sheet metal and casting.

Graduate prerequisites and permission of the department.

G-1090-531, 532, 533, 534 Graduate Ceramics: Pottery and Sculpture I, II, III, IV 3 sh each

Experimentation with the potter's wheel; handbuilding methods of forming; further experimentation with clay compositions, glazes and methods of firing. Advanced students will be responsible for developing craftsmanship and a personal idiom.

Prerequisites: Undergraduate experience in ceramics, portfolio, and instructor's approval.

G-1090-541, 542 Form in Fiber I, II (Graduate) 3 sh each

Designing with simple and four harness floor looms, in a variety of techniques and materials.

Prerequisite: 10 sh in Art.

G-1090-543, 544, 545, 546 Graduate Decoration of Fabric I, II, III, IV 3 sh each
 Survey course in all aspects of fabric embellishment: tie-dye, batik, blockprint, tritik, discharge, silkscreen printing, 3-M matrix, etc.

G-1090-547, 548 Form in Fiber III, IV 3 sh each
 Continuation of studies begun in Form in Fiber I and II.
 Prerequisites: Form in Fiber II.

G-4921-550, 551 Graduate Screen Printing I, II 2 to 3 sh
 The graphic art techniques of silk-screen from the creation of the master design through the construction of necessary printing facilities and printing; the use of tusche, glue, stencil lacquer, and photographic techniques.
 Graduate prerequisites and permission of department.

G-4921-552, 553 Graduate Intaglio Printing I, II 3 sh each
 Additional competency and depth of experience in etching, dry point, aquatint, and soft techniques. For art majors or other advanced art students.
 Graduate prerequisites and department permission.

G-4921-554, 555 Graduate Relief Printing I, II 2 sh each
 The woodcut and its relation to painting in color, size and richness; the cutting of various woods and veneers; printing approaches; inventiveness in using other materials in relation to wood. Lectures on prints of the past and field trips to important print collections and exhibits.
 Graduate prerequisites and permission of department.

G-4921-564, 565 Graduate Screen Printing III, IV 2 sh each
 Continuation of prerequisite: 4921-551.

G-4921-566, 567 Graduate Intaglio III, IV 3 sh each
 Continuation of Graduate Intaglio II.

G-4921-574, 575 Graduate Relief Printing III, IV 2 sh each
 Continuation of prerequisite: 4921-555.
 Prerequisite: Fine arts major or permission of instructor.

MUSIC

Graduate Advisor: Dr. Jack Sacher

Department Chairman: Dr. Maureen Carr

Graduate study in music offers three concentrations leading to the degree of Master of Arts: performance, theory/composition and music education. Performance stresses applied music skills; theory/composition stresses creativity and the structure of music; music education stresses philosophical and practical approaches to the work of the music specialist in the American public school.

Although the study of music theory and of applied music is required of all graduate students regardless of the concentration, each concentration provides for individualized course election in accordance with the background, needs and interests of the student.

Registration in applied music and theory is dependent on the placement examination administered by the department; students may not register for work in these areas until the examination has been taken (see below under Admission Requirements).

Admission Requirements

In addition to the general College graduate admission requirements stated in this bulletin (see Admission to Graduate Study), all students must present an undergraduate major in music with at least 40 semester hours of work in theory, music history and private study in a performance medium. Courses in music education may be included as part of this background.

Matriculation as a graduate music major requires taking the music department's Audition and Placement Examination, offered annually in October, February and June. Students must request this examination by writing to the Graduate Advisor two weeks preceding the examination. All applicants must demonstrate familiarity with musical vocabulary and literature and proficiency in the following: performing primary, sight singing, aural and written theory, score analysis, listening analysis, and piano secondary skills (keyboard harmony, sight-reading of chorale literature and the like). Audition literature in the primary medium must represent significant solo material from a variety of eras, one of which must be contemporary. Applicants majoring in orchestral instruments must also present significant solo passages or ensemble passages from orchestral literature.

Applicants to the theory/composition concentration must submit a portfolio of compositions and/or analytical studies for consideration by the theory faculty.

Applicants to the performance concentration must present an undergraduate major in the primary medium (including at least six semesters of study plus a graduation recital) or professional experience satisfactory to the music department.

Applied Music

Special regulations and procedures for the study of Applied Music are available from the Graduate Advisor. Tuition for the study of Applied Music is based on a special fee structure, information regarding which is available from the Registrar or the Department of Music.

Applied Music may be taken for academic credit only after the student has completed the Department Audition and Placement Examination. Every course number in the area of Applied Music requires the written permission of the Graduate Advisor, the instructor and

the Department Chairman. These signatures must be obtained by July 1 (for those desiring study in the fall) or by December 1 (for those studying in the spring). Lessons are normally not given in the summer. A signature of approval is good for only one semester.

No more than 2 semester hours of credit may be awarded for work in a secondary medium.

Courses for 4 and 6 semester hours are open only to majors in the performance (Applied Music) concentration. The grade for the last semester of the sequence will not be given until all recital requirements are completed.

Examinations

All candidates for the degree of Master of Arts in music must pass the department's Comprehensive Examination, given each year in March. Applications for this examination must be made in writing to the Graduate Advisor by February 1 of the year in which the examination is to be taken.

Music Education majors will be examined in pedagogy, music theory, music history and any secondary performing media taken as part of the graduate program. Theory/Composition majors will take examinations in music theory, music history and any secondary performing media taken as part of the graduate program. Performance majors will be examined in music theory, music history and any secondary performing media taken as part of the graduate program. Voice majors will be required to translate into acceptable English prose a passage from any two of the following: German, French, Italian.

Requirements for the Master of Arts Degree in Music

Note—The 32 semester hours noted for each concentration is a minimum. Undergraduate transcripts and audition results may require additional undergraduate work before graduate courses are begun or graduate work in excess of the normal 32 semester hours.

(Concentration in Performance)

- I. Required courses 18 semester hours
 - A. Either of the following sequences: 1004-504/505* or 1004-506/507/508*
(* Grades to be withheld pending completion of recital requirements). 12
 - B. Theory sequence 1016-511/512. 6
- II. Electives in Music History or Music Literature 8 semester hours
- III. Humanities electives (art, language, literature,
history, philosophy) 6 semester hours
- IV. Two recitals. 0 semester hours
 - A. Each to include at least 60 minutes of music,
exclusive of intermissions or pauses.
 - B. One must be public; the other may be public or
before a faculty jury. Procedures are available
from the Graduate Advisor for music.
- V. Comprehensive examination in music theory, music history
and secondary performing media. (Voice majors and

accompanying majors will be given language tests as well. Details are available from the Graduate Advisor)

Note: Performance majors wishing to emphasize accompanying may arrange this with the Graduate Advisor.

(Concentration in Theory/Composition)

- I. Required Courses 23 semester hours
 - A. Applied Music, selected with approvals of instructor, Graduate Advisor and Department Chairman from 1004-500/501/502/503 4
 - B. Theory sequence 1016-511/512 6
 - C. Private study in composition (may be either creative or analytical work) 1016-518/519 6
 - D. Seminar or independent study in music history and research 3
 - E. Theory and composition 4
- II. Humanities electives (art, language, literature, history, philosophy) 3 semester hours
- III. Music electives 8 semester hours
- IV. Composition and public performance of one of the larger forms for orchestra, vocal ensemble or chamber ensemble 0 semester hours
- V. Comprehensive examination in music theory, music history and secondary performing media 0 semester hours

(Concentration in Music Education)

- I. Required Courses 16 semester hours
 - A. Applied Music, selected with approval of instructor, Graduate Advisor and Department Chairman from 1004-500/501/502/503 4
 - B. Education or Psychology 3
 - C. Theory sequence 1016-511/512 6
 - D. Seminar in Music Education 0832-603 3
- II. Music Education 6 semester hours
- III. Humanities electives (art, theater, literature, history, philosophy) 6 semester hours
- IV. Music electives 4 semester hours
- V. Comprehensive examination in music theory, music history, music pedagogy and secondary performing media 0 semester hours

Students may study applied music only when fully accepted into the graduate degree program in music. Lessons to be taken in a fall semester must be arranged with the graduate advisor for music no later than the previous July 1; in a spring semester, no later than the previous December 1. Applied music may be studied in summer session only with permission of the graduate advisor for music, and in no case for more than 2 semester hours.

Applied music may be studied only with a member of the faculty or with teachers ap-

proved by the department. Students of applied music are expected to take jury examinations for courses of 4 or 6 semester hours in each semester in which a full recital is not given.

It is highly advisable for non-majors or pre-matriculated students to seek the advice of the graduate advisor for music for any of the following courses.

MUSIC

Course Descriptions

- | | |
|--|-------------|
| H-0832-520 General Music in the Secondary School | 3 sh |
| Examination and practicum of methods, materials and philosophies of non-performance courses in the junior and senior high school. | |
| H-0832-522 Classroom Methods: Piano | 2 sh |
| Elementary and secondary classroom methods in the medium of the piano, dealing with principles, materials and methods in teaching groups of students. Designed for teachers wishing to exchange or learn new approaches to classroom techniques. | |
| H-0832-523 Classroom Methods: Brass Instruments | 2 sh |
| Materials of 0832-522 as applied to the brass choir. | |
| H-0832-524 Classroom Methods: Woodwind Instruments | 2 sh |
| Materials of 0832-522 as applied to the woodwind choir. | |
| H-0832-525 Classroom Methods: Stringed Instruments | 2 sh |
| Materials of 0832-522 as applied to the string family. | |
| H-0832-526 Classroom Methods: Percussion Instruments | 2 sh |
| Materials of 0832-522 as applied to percussion instruments. | |
| H-0832-527 Classroom Methods: Voice | 2 sh |
| Materials of 0832-522 as applied to singing. | |
| H-0832-578 The Kodaly System in Music Education | 2 sh |
| Procedures for using Kodaly materials and techniques in teaching music reading and comprehension. | |
| H-0832-579 Problems and Materials of Instrumental Music | 2 sh |
| Evaluation of teaching experiences; problems of organizing instrumental music in school; literature for orchestra, band and small ensemble at various levels. | |
| H-0832-580 Problems and Materials of Choral Music | 2 sh |
| Survey of choral repertoire for accompanied and unaccompanied groups, for changing, unchanged and mixed voices. Evaluating materials; building programs. Class constitutes a laboratory chorus. | |
| H-0832-581 Orff Workshop I—Concepts and Skills | 3 sh |
| Study of basic philosophy of the Orff Schulwerk through movement, melodic and rhythmic training, improvisation and the use of relevant instruments and materials. | |
| Prerequisite: Teacher certification in any field or preparation satisfactory to instructor. | |

H-0832-582 Orff Workshop II—Pedagogy and Practices 3 sh

Refinement of skills in the use of Orff concepts, materials and techniques; practicum in the Orff pedagogy as applicable to American children.

Prerequisite: 0832-581 or equivalent approved by the instructor.

H-0832-583 Orff Workshop III—Advanced Principles and Techniques 3 sh

Comprehensive study of the scope of Orff pedagogy and mastery of techniques necessary for the development of music curricula and materials based on employing the Orff approach.

Prerequisite: 0832-582 or equivalent approved by the instructor.

H-0832-603 Seminar in Music Education 3 sh

Philosophies of music education and their application to the classroom. Investigation and application of techniques of research as they apply to music education.

H-1004-500, 501 Applied Music I & II: Primary Instrument 2 sh each

Study of performance in the student's major area of expression in a manner suited to those specializing in the area of music education or theory-composition. Fifteen private lessons per semester.

Admission by permission only. Music fee. See schedule booklet.

H-1004-502, 503 Applied Music Secondary Instrument I, II 1 sh each

An elementary course for the beginner or the student with limited background. Fifteen half-hour lessons per semester, private instruction.

Admission by permission only. Music fee.

H-1004-504, 505 Applied Music III, IV: Primary Instrument 6 sh each

Intensive study in a major performing area for students majoring in applied music. Two recitals of professional caliber are prepared as representative of two semesters of work, or one recital per semester. At least one must be publicly performed, the other may be before a faculty jury. Admission by audition only and open only to majors in applied music. Fifteen one-hour lessons per semester. Music fee.

H-1004-506, 507, 508 Applied Music V, VI, VII: Primary Instrument 4 sh each

Intensive study in a major area of performance similar to 1004-504, 505. Open only to students majoring in applied music. Fifteen one-hour lessons per semester.

Admission by audition only. Music fee: See schedule booklet.

H-1004-528 Survey of Wind Instrument Music 2 sh

For brass and woodwind players, solo, ensemble and full band; materials for elementary and secondary school instrumentalists. Attention to music written for wind instruments and newly-published compositions. Class constitutes a laboratory band and ensemble groups.

H-1004-529 Choral Conducting 2 sh

Problems and techniques of choral rehearsal and performance: tone production, intonation, balance and diction. Accompanied and unaccompanied choral repertoire.

Prerequisites: Undergraduate course in choral conducting or experience satisfactory to the instructor or the graduate advisor for music.

H-1004-530 Advanced Conducting 3 sh

Baton techniques, clef reading, playing from score at the piano, transposition, score

analysis, rehearsal techniques and problems of interpretation and accompaniment by orchestra and band, as well as choral conducting techniques.

Prerequisite: Preparation satisfactory to the instructor or the graduate advisor.

H-1004-531, 532 Ensemble: Chorus I, II 2 sh each

Rehearsal and performance in conventional choral media. Admission by audition only.

H-1004-533, 534 Ensemble: Opera Workshop I, II 2 sh each

Rehearsal and performance of operatic repertoire in English or English translation. Admission by audition only. Auditions held in the semester prior to the one in which the workshop is offered. Open to pianists and singers.

H-1004-535, 536 Ensemble: Band I, II 2 sh each

Rehearsal and performance of band and wind ensemble literature. Admission by audition only.

H-1004-537, 538 Ensemble: Orchestra I, II 2 sh each

Rehearsal and performance of orchestral repertoire. Admission by audition only.

H-1004-539 Master Class in Musical Performance: German Vocal Literature 2 sh

Coaching small groups in refinements of performance, including stylistic interpretation, programming, interpretative analysis, diction, etc. Open through audition to singers and pianists.

H-1004-540 Master Class in Musical Performance: Italian Vocal Literature 2 sh

Similar to 1004-539, but focusing on Italian repertoire. Open through audition to singers and pianists.

H-1004-541 Master Class in Musical Performance: French Vocal Literature 2 sh

Similar to 1004-539, but focusing on French repertoire. Open through audition to singers and pianists.

H-1004-542 Master Class in Musical Performance: English Vocal Literature 2 sh

Similar to 1004-539, but focusing on English repertoire. Open through audition to singers and pianists.

H-1004-543 Master Class in Musical Performance: Woodwind Literature 2 sh

Coaching small groups in solo and small ensemble literature for woodwind instruments. Stress on stylistic interpretation, tone, balance and other refinements of performance. Open through audition. Pianists may register as accompanists, but must audition.

H-1004-544 Master Class in Musical Performance: Brass Literature 2 sh

Similar to 1004-543, but focusing on brass repertoire. Open to pianists and brass players only, through audition.

H-1004-545 Master Class in Musical Performance: String Literature 2 sh

Similar to 1004-543, but focusing on string repertoire. Open to pianists and string players through audition.

H-1004-546 Master Class in Musical Performance: Organ Literature 2 sh

Similar to 1004-543, but focusing on organ repertoire. Open to organists only, through audition.

H-1004-547 Master Class in Musical Performance: Piano Literature 2 sh

Similar to 1004-543, but focusing on piano repertoire. Open to pianists only, through audition.

H-1004-548 Master Class in Musical Performance: Percussion Literature 2 sh

Similar to 1004-543, but focusing on percussion repertoire. Open to percussionists through audition.

H-1006-549 Modern Music 3 sh

Study of musical styles of the 20th century. Historical sources, major composers and recent trends.

H-1006-550 Chamber Music 3 sh

Survey of vocal and instrumental music composed for one to ten performers, one per part, from the Renaissance through the modern era. Analysis of both compositional style and nature of chamber genres.

H-1006-551 The Literature of the Orchestra 3 sh

Historical survey of such genres as the suite, overture, concerto, symphony and tone poem from the development of orchestral style of playing in the 17th century to the present.

H-1006-552 An Ethnological Approach to Music 3 sh

Non-Western music; ethnic roots and influences, theory, media and performance practices. Folk and professional idioms of the Far East, Near East, Africa, Europe and the Americas. Study for non-majors will emphasize musical experience and social-cultural background, while music majors will also pursue a more technical approach.

H-1006-553 Jazz 3 sh

Jazz as an art form, its impact on music and other contemporary arts; the sociological impact in American and world culture. Examination of specific performance techniques. Prerequisite: At least one undergraduate or graduate semester of music or permission of the instructor or graduate advisor for music.

H-1006-554 Development of the Opera I 3 sh

Operas of the Baroque and Classical eras from Montverdi through Beethoven; evolution of style, changing aesthetics, characterization and plot development and the cultural environment within which these developments have taken place.

H-1006-555 Development of the Opera II 3 sh

Continuation of 1006-554, examining operatic styles and representative works of the Romantic and Modern eras.

Prerequisite: 1006-554 or permission of the instructor or graduate advisor for music.

H-1006-604 Seminar in Historical Research 3 sh

Study of music bibliography, research method and critical analysis. Open to fully matriculated students majoring in music.

H-1006-605 Seminar in Historical and Theoretical Studies 3 sh

Research and discussion of selected topics in the literature of music focusing on stylistic and analytical problems.

Prerequisite: Graduate music major status or permission of the instructor.

H-1016-501 Music Typography 2 sh

Preparation of music for publication through the use of the music typewriter; preparation of scores, instrumental parts and vocal scores.

H-1016-0509, 0510 Analytical Systems and Procedures in Music I and II

3 sh each

An introduction to sophisticated analytical systems with particular emphasis on Schenker analysis both as a tool for improving hearing and performance and as a worthy study of music in its own right.

Prerequisites: Music major status and completion of department placement test; 1016-509 (for 1016-510)

H-1016-511 Theoretical and Aural Skills in Music I

3 sh

Principles and practice of music construction, aural skills in manipulating pitch and rhythm, and related structural analysis. The total spectrum of music as a base, with specific techniques of pitch and rhythm approached from harmonic and contrapuntal standpoints. Primitive and simple folk idioms, model counterpoint in two and three parts, diatonic tonal harmony in vocal and instrument styles, tonal counterpoint in two parts and free composition. Open to music majors only.

H-1016-512 Theoretical and Aural Skills in Music II

3 sh

Continuation of 1016-511. Complex non-Western systems, modal and tonal imitative counterpoint in three and four parts, chromatic tonal harmony and expanded resources and techniques of the twentieth century.

Prerequisite: 1016-511 or equivalent, the latter determined by the instructor or the graduate advisor for music.

H-1016-513 Composition

3 sh

Writing of variations, small forms, songs and compositions for small ensembles. Analysis and workshop performance.

Prerequisite: 1016-511 or equivalent.

H-1016-0514 Counterpoint

3 sh

Analysis and composition of polyphonic techniques as evidenced in inventions, canons, and motets, based on the several compositional styles of Western music.

Prerequisite: 1016-0512 or equivalent.

H-1016-515 Advanced Counterpoint

3 sh

Analysis and composition of polyphonic forms, techniques in invention, canons and motets based on the several compositional styles of Western music.

Prerequisite: 1016-512 or equivalent.

H-1016-516 Advanced Instrumentation

2 sh

Workshop course: tutti instrumentation in orchestra and band; scoring for small ensembles; instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Performance of student instrumentations when possible.

Prerequisite: 1016-511 or equivalent.

H-1016-517 Theory of Sound

2 sh

Phenomena of sound as related to hearing music theory, musical instruments, reproduction of music (phonograph, etc.) and conditions under which music is heard.

H-1016-518, 519 Private Study in Composition I, II**3 sh each**

Advanced work in musical composition in forms and genres determined jointly by teacher and student. Fifteen private lessons per semester.

Admission by permission only. Music fee.

Independent Study in Music

- | | | | |
|----|----------|---|------------------|
| 1. | 1004-599 | Independent Study in Performance | 3 sh each |
| | 1006-599 | Independent Study in Music History and Literature | |
| | 1016-599 | Independent Study in Theory/Composition | |
| | 1017-599 | Independent Study in Music Therapy | |
| | 1018-599 | Independent Study in Sacred Music | |

Regularly listed courses pursued in greater depth, by arrangement with the graduate advisor for music prior to registration. May be elected more than once during the program, but only one course per semester. Written permission required.

- | | | | |
|----|----------|---|------------------|
| 2. | 0832-600 | Independent Study in Music Education | 4 sh each |
| | 1004-600 | Independent Study in Performance | |
| | 1006-600 | Independent Study in Music History and Literature | |
| | 1016-600 | Independent Study in Theory/Composition | |
| | 1017-600 | Independent Study in Music Therapy | |
| | 1018-600 | Independent Study in Sacred Music | |

Individual pursuit of a research topic culminating in a written document of length and scholarly integrity. Arranged with the graduate advisor for music and a course advisor appointed by him, prior to the independent study semester. May cover two semesters; student registers for the one in which the work will be completed. Written permission required. Special fee: See schedule booklet.

SPEECH AND THEATER

Graduate Advisor: Dr. Clyde W. McElroy

Department Chairman: Dr. Wayne S. Bond

Graduate students may pursue a Master of Arts degree to enrich professional activity, to prepare for further graduate study or to increase their skills as speech and theater teachers.

The program is flexible and the candidate may concentrate in one of three areas: theater, speech, and public media arts. A student may also work in all areas if he wishes. The latter approach is frequently used by the graduate who is a secondary school teacher. Graduate students will consult with the graduate advisor in selecting courses that will best prepare them in their areas of concentration.

The department's facilities include a 1,000-seat major theater and flexible studio theater, both with remote-control pre-set switchboards; a well-equipped scene shop; extensive costume and prop collections, with work rooms; expanding television and film workshop studios and extensive recording and playback equipment.

Admission Requirements

Students wishing to matriculate as speech and theater majors must have completed a major or the equivalent from the following areas: theater, oral interpretation, speech, or mass communication. It is assumed that most of this work will have been in the area selected for graduate concentration. Some students may need to improve their preparatory backgrounds through undergraduate courses for which credit is not given.

Requirements for the Master of Arts Degree in Speech and Theater

The candidate must complete all four parts of the requirements for the degree as detailed below.

- I. Core Courses..... 7-9 semester hours

1506-501	Survey of Research Methods.....	3
0603-1007 or 1506-600	Thesis.....	4
or non-thesis option: selected courses recommended by Graduate Committee.....		6
- II. Elective Courses within the Concentration..... 19 semester hours

(Concentration in Theater)

Emphasis in either Technical Theater or Acting/Directing

1007-500	Independent Study.....	By arrangement
1007-504	Contemporary Experimental Theater.....	3
1007-507	Seminar in Dramatic Production.....	3
1007-508	Internship in Dramatic Production.....	3-7
1007-513	Modern and Contemporary Theater History.....	3
1007-514	Non-Western Drama and Theater.....	3
1007-517	Theater Criticism.....	3
1007-525	Advanced Acting Workshop.....	3
1007-535	Advanced Directing Workshop.....	3

1007-545	Scenic Design I: The Legitimate Theater.....	3
1007-546	Scenic Design II: The Performing Arts.....	3
1007-554	Stage Lighting Design.....	3
1007-555	Advanced Problems in Technical Production.....	3
1007-575	Seminar in Costume Design & Construction.....	3
1007-580	Theater Management.....	3
1007-599	Independent Study.....	By arrangement
1007-600	Thesis.....	4
1506-504	Advanced Applied Phonetic Study.....	3
1506-509	Special Problems in Speech and Theater.....	3
1506-565	Advanced Oral Interpretation.....	3

(Concentration in Speech)

1506-500	Independent Study.....	By arrangement
1506-501	Survey of Research Methods.....	3
1506-503	Advanced Voice and Speech Improvement.....	3
1506-504	Advanced Applied Phonetic Study.....	3
1506-509	Special Problems in Speech and Theater.....	3
1506-511	Revolutionary Rhetoric.....	3
1506-519	Seminar in Rhetorical Criticism.....	3
1506-521	Competitive Forensics.....	3
1506-533	Lecture and Lecture Recital.....	1
1506-536	Seminar in Persuasion.....	3
1506-560	Internship in Oral Communication.....	3-7
1506-565	Advanced Oral Interpretation.....	3
1506-599	Independent Study.....	By arrangement
1506-600	Thesis.....	4
0603-581	The Broadcast Media and Mass Culture.....	3

(Interdisciplinary Concentration in Public Media Arts)

A study of the forces affecting the exchange of information with the public and the techniques utilized in transmission.

0603-500	Independent Study.....	By arrangement
0603-510	Television Production I.....	3
0603-511	Television Production II.....	3
0603-580	Internship in Public Media Arts.....	3-7
0603-581	The Broadcast Media and Mass Culture.....	3
0603-582	Techniques of Broadcast Communication.....	3
0603-599	Independent Study.....	By arrangement
0603-600	Thesis.....	4
1506-511	Revolutionary Rhetoric.....	3
1506-519	Seminar in Rhetorical Criticism.....	3
1506-533	Lecture and Lecture Recital.....	1

In addition, the graduate student in this concentration should select six to nine hours of related graduate courses from the total College offerings, with the advisor's permission. Prerequisites required in these courses can be taken as free electives.

III. Free Electives 6 semester hours
Can be utilized as necessary for graduate course prerequisites and/or professional education courses.

IV. Additional departmental requirements:

1. Written Comprehensive Examination.
2. Demonstration of oral competence: candidate must demonstrate proficiency in handling speech in a public situation.

Minimum with Thesis: 32 semester hours

Minimum without Thesis: 34 semester hours

In addition to the courses described below, the Department offers special workshops and seminars presented by working professionals from the various fields. Graduate students should consult with their advisor to take advantage of these opportunities.

SPEECH AND THEATER

Course Descriptions

I-0603-510 Television Production I **3 sh**
Insight and experience in the production of in-studio programs for television. Attention on commercial production, news, interviews, demonstrations, lighting and graphics. Open to majors or permission of instructor.

I-0603-511 Television Production II **3 sh**
Group activity in the preparation and presentation of broadcast materials including music programming, drama, interviews and educational school programming.
Prerequisite: Television Production I.

I-0603-580 Internship in Public Media Arts **3-7 sh**
Off campus practicum assignments: radio and television broadcasting facilities and other learning sites. Broad, balanced and locally supervised experience by arrangement. Open to majors. Application through the department prior to registration.

I-0603-581 The Broadcast Media and Mass Culture **3 sh**
Influences and effects of the broadcast media on society; policy decisions and the influence of the broadcast media as conveyors of information and stimulus for change. Open to all graduate students.

I-0603-582 Techniques of Broadcast Communication **3 sh**
Techniques and ethics in the production of informative, entertainment, persuasive and public relations material for mass public consumption. Open to all graduate students.

I-0603-585 Proseminar in Broadcasting **3 sh**
A study of the evolution of the broadcast industry's present structure and operation, as primarily influenced by political and economic forces. The course will also discuss contemporary issues that may cause structural change in the industry.

I-0603-600 Thesis (see 1506-600)**I-1007-504 Contemporary Theater Practice****3 sh**

The status and practices in today's professional theater: writing, playing, staging and producing problems and trends of current theatrical fare. Supplemented by theatrical personnel and visits to professional producing groups in the metropolitan area. Open to all graduate students.

I-1007-507 Seminar in Dramatic Production**3 sh**

Advanced play production students pursue projects to meet individual needs in acting, directing, technical theater or other production aspects. Open to majors.

I-1007-508 Internship in Dramatic Production**3-7 sh**

Practical experience in dramatic production under supervision of staff member of professional, semi-professional, community or educational theater, on or off campus. Student assists director, designer, crew chief or technical supervisor. Contracts drawn by student, college sponsor and off-campus supervisor. Open to majors. Application through department before registration.

I-1007-511 Forms of Tragedy**3 sh**

The "evolution" of tragic theory as it manifests itself in each of the periods of theater history and dramatic criticism. Included in the examination is an evaluation of representative tragic playscripts in terms of style, structure, "tragic devices," content, and performance.

Prerequisite: Permission of instructor.

I-1007-512 Forms of Comedy**3 sh**

The "evolution" of comic theory as it manifests itself in each of the periods of theatre history and dramatic criticism. Included in the examination is an evaluation of representative comic playscripts in terms of style, structure, "comic devices," content, and performance.

Prerequisite: Permission of instructor.

I-1007-513 Modern and Contemporary Theater History**3 sh**

Theatrical history associated with Western culture from 1890 to the present; the contemporary theatrical scene and its direct heritage. Some attention to American theater but major emphasis on British and Continental developments. Open to all graduate students with a background in dramatic literature.

I-1007-514 Non-Western Drama and Theater**3 sh**

Theatrical forms and dramatic literature of non-Western cultures in historical and contemporary context: China, Japan, India, Southeast Asia, Africa. Theatrical practices in staging various dramatic forms. Open to all graduate students with a background in dramatic literature or Asian studies.

I-1007-517 Theater Criticism**3 sh**

Standards and values, both personal and historical, by which plays are judged. Student-written critiques of how theater communicates in all of its various facets. Mandatory attendance at community and professional productions. Open to all graduate students with a background in dramatic literature or theater production.

- I-1007-525 Advanced Acting Workshop** 3 sh
Challenging roles, problems of style and control, as well as extensive independent study. Open to majors or permission of instructor.
- I-1007-535 Advanced Directing Workshop** 3 sh
Directing repertory and period plays. Preparation for thesis production. When possible, the student will produce a full-length play and complete a production notebook. Open to majors or permission of instructor.
- I-1007-545 Scenic Design I: The Legitimate Theater** 3 sh
Stage design as related to the play, director and audience; styles of design, perspective sketch and stage model in planning stage setting. Stage construction techniques used to demonstrate the necessity of scene design in planning stage production. Open to majors.
- I-1007-546 Scenic Design II: The Performing Arts** 3 sh
Design problems inherent in musical comedy, opera and dance. Physical qualities of space, arena and proscenium staging and the challenges of each. Projects will involve both lighting and scenic design. Open to graduate students with a background in the performing arts.
- I-1007-554 Stage Lighting Design** 3 sh
Introduction to light from pragmatic and aesthetic points of view: functions and qualities as a design media; types of control and instrumentation available to designer. Development of several lighting designs. Open to majors or permission of instructor.
- I-1007-555 Advanced Problems in Technical Production** 3 sh
Physical resources available to technician. Exploration of new materials and techniques as well as extensive work in standard techniques. Knowledge of drafting techniques helpful. Open to majors or permission of instructor.
- I-1007-575 Seminar in Costume Design and Construction** 3 sh
Costume as one visual element of design in the theater. Research procedure, design theory, construction techniques, use of materials.
- I-1007-580 Theater Management** 3 sh
The theater as a business enterprise: production units; box office procedures; standard contractual arrangements; unions and their regulations; subscription management. Manager as a community relations specialist; publicity; the theater as a community resource. Open to graduate students with a background in performing arts.
- I-1007-600 Thesis (see 1506-600)**
- I-1506-501 Survey of Research Methods** 3 sh
Research methods relating to rhetorical theory, public address, interpersonal communication, theater history, dramatic production and contemporary theatrical idiom. Historical, critical, descriptive, quantitative and experimental models and methodologies.
- I-1506-503 Advanced Voice and Speech Improvement** 3 sh
To refine the voice and diction patterns of the advanced student. Techniques of evaluating and improving their own and other's in a practical setting.
- I-1506-504 Advanced Applied Phonetic Study** 3 sh
The phonetic approach to erasing and acquiring typical and atypical American and foreign speech sounds and patterns for stage, radio, TV and classroom. Open to majors.

I-1506-509 Special Problems in Speech and Theater**3 sh**

Individual problems in theater, speech and mass communication; reports, papers, panel discussion and experimentation. Open to majors or permission of instructor.

I-1506-511 Revolutionary Rhetoric**3 sh**

The "revolutionary" speaking of the last decade. Civil rights, university reform and war protest speakers in historical perspective. The student, as rhetorical critic, evaluating speaker and audience, will assess the ultimate effects of revolutionary speaking. Open to all graduate students.

I-1506-519 Seminar in Rhetorical Criticism**3 sh**

Functions, types and problems of rhetorical criticisms. Comparison of Aristotelian and non-Aristotelian approaches.

I-1506-521 Competitive Forensics**3 sh**

Techniques for directing and coaching intra-and interscholastic forensic events. Discussion, debate, parliamentary congresses; speaking, reading and performing contests; local, regional and national tournament administration; scheduling, rules, publicity, housing and awards. Open to all graduate students.

I-1506-533 Lecture and Lecture Recital**1 sh**

Study of professional work on public platform climaxed by lecture or recital of a professional nature.

I-1506-536 Seminar in Persuasion**3 sh**

Critical examination of psychological, sociological and cultural dimensions of persuasive discourse.

I-1506-560 Internship in Oral Communication**3-7 sh**

Off-campus practicum assignments range from serving on campaign speaker's or public speaker's speech staff to coaching students and/or conducting forensic tournaments. Broad, balanced and locally supervised experience, by arrangement. Application through the department prior to registration.

I-1506-565 Advanced Oral Interpretation**3 sh**

Techniques in interpretation of poetry and prose; analysis and presentation of types of literary material (short story, ballad, narrative sonnet, etc.) for use in classroom and special programs. Open to all graduate students.

I-1506-600 Thesis**4 sh**

Individual research or creative project selected under advisement of a faculty committee. An oral exam follows the project; student should register for the semester in which work will be completed.

Written permission for registration from the graduate advisor is required.

SCHOOL OF HUMANITIES

Wolfgang B. Fleischmann, Ph.D., Dean

The School of Humanities offers graduate work toward the Master of Arts degree in English and American literature, French language and literature, and the literatures of Spain and Spanish America. All three programs cooperate in an M.A. program in Comparative Literature coordinated and administered by the Department of English. The Comparative Literature program also draws on faculty from the Departments of Classics, German/Slavic, and Philosophy/Religion for both instruction and advisement.

All M.A. programs in the School of Humanities serve as continuing training for in-service teachers. They may also be used as threshold preparation for Ph.D.-level work in appropriate disciplines and further provide intellectual enrichment to students who wish to develop deeper understanding of a subject for its own sake. A significant number of M.A. graduates have, in recent years, gone on to doctoral programs at major universities. Some students have found M.A. training in the School of Humanities to be both useful and enhancing to careers in business and government.

The School is attractively housed in Partridge Hall, a classroom and faculty office facility. All graduate courses and curricula in the School of Humanities are under continual revision by a committee, chaired by the Dean of the School.

ENGLISH AND COMPARATIVE LITERATURE

Graduate Advisor: Dr. James Nash
Department Chairman: Dr. Claire Healey

In the Master's program in literature the student will study individual authors and their works intensively, while developing a broader understanding of literary periods, themes, and types. Students are expected to demonstrate the ability to participate in sophisticated scholarly discourse, both orally and in writing. Within the total 33 semester hours of course work, one of four concentrations may be chosen: British Literature to 1745; British Literature 1745 to the Present; American Literature; and Comparative Literature. In addition, courses are offered in such special topics as the teaching of writing, recent research in the teaching of English, the film, and the use of computers in humanistic studies.

Admission Requirements

Candidates for matriculation in the Master of Arts program of this department must show a B average or better in their undergraduate work and a score of not less than 500 (Verbal) on their Graduate Record Examinations. Most applicants will have majored in English at the undergraduate level. Students with strong academic credentials may also apply, even if they do not have the recommended background in English. The graduate advisor will interview each candidate for the program regarding his scholastic record and his intellectual and professional goals.

Requirements for the Master of Arts Degree in English and Comparative Literature

- I. Distribution of Course Work
 - A. British and American Literature
 - 1. Seminar in Literary Research (to be taken near the beginning of the program)..... 3 semester hours

2. Thesis Writing (to be taken at the end of the program) 3 semester hours
 3. A concentration in one of three major areas as follows: 9 semester hours
 - a. British Literature to 1745
 - b. British Literature from 1745
 - c. American Literature
 4. To be distributed among the remaining two major areas and the area of Comparative Literature 9 semester hours
 5. Electives 9 semester hours
- Minimum: 33 semester hours

B. Comparative Literature. In cooperation with other divisions in the School of Humanities, the department offers students the opportunity to concentrate in Comparative Literature. Courses are focused on the interrelationships among literatures. Significant authors, ideas, movements, and literary types in different ages and cultures are selected for comparison. (N.B.: Comparative Literature courses, prefixed 1503, are open to all students, regardless of their concentration. Lectures and readings are in English.)

1. Seminar in Literary Research (to be taken near the beginning of the program) 3 semester hours
2. Thesis Writing (to be taken at the end of the program) . . 3 semester hours
3. A concentration in Comparative Literature 9 semester hours
4. French or Spanish Literature 9 semester hours
5. To be distributed among the three major areas of British and American Literature 9 semester hours

Minimum: 33 semester hours

- II. Students must demonstrate a reading knowledge of a foreign language, either by passing a written examination or by earning a grade of B in the French Reading Course (1102-0100), before taking the comprehensive examination or registering for Thesis Writing. Examinations will normally be given in French, German, Russian, Italian, or Spanish. Other languages may be offered with the approval of the department. Students concentrating in Comparative Literature will receive approval of the language of their primary area of study.
- III. All candidates for the master's degree must pass a three-hour comprehensive examination designed to test critical ability, familiarity with British, American, and Comparative Literature, and competence in writing. Students must complete one-half of their course work before taking the comprehensive examination, and must pass the examination before registering for Thesis Writing. Preparation for the examination is the student's responsibility. He or she may, however, ask for guidance from any and all members of the graduate faculty. For best results, the student is advised to choose courses for exposure to studies in genres, periods, individual authors, and criticism. Students should consult the graduate advisor the semester before taking the examination.

ENGLISH AND COMPARATIVE LITERATURE

Course Descriptions

British Literature

K-1501-500 Old English Literature

3 sh

Specimens of Old English prose and poetry are read in the original language and studied for an appreciation of their literary art. No previous study of Old English is required. The first half of the course is spent on grammar and pronunciation, using prose from the Chronicles and other works as examples. Oral recitation is required of all students. Poetry is studied in the second half of the course. Topics include the oral-formulaic tradition, the verse types, and the mixture of Christian and pagan themes characteristic of the literature.

K-1501-505 Chaucer

3 sh

An intensive study of *The Canterbury Tales* and other works against their literary and social backgrounds, with special attention to Chaucer's language and to the tools of Chaucerian scholarship. No previous study of Middle English is required.

K-1501-508 Shakespeare Studies: Tragedies

3 sh

Shakespeare's tragic drama against a background of classical and medieval theories of tragedy, and in relation to the practice of his contemporaries. Consideration is given to Shakespeare's use of plot sources and to Elizabethan theories of rhetoric.

K-1501-509 Shakespeare Studies: Comedies

3 sh

Shakespeare's comic art in the light of comic theory and practice from Aristotle to the present. Areas of analysis include Shakespeare's use of Roman and native English comedy, his language, characters, and sources, and the traditions of Shakespearean criticism.

K-1501-510 Shakespeare Studies: Histories

3 sh

A study of the ten English history plays. Shakespeare's use of historical sources and variations from historical fact are examined carefully. Shakespearean scholarship, criticism, and production are also covered.

K-1501-511 Elizabethan and Jacobean Drama

3 sh

A comprehensive view of the period of the apex of English drama, from 1550 to the closing of the theaters in 1642. Major works by Elizabethan and Jacobean dramatists other than Shakespeare are studied in the light of Medieval English drama and the new Renaissance theories of Shakespeare's contemporaries. Attention is given to changes in subject matter, tone, dramaturgy, and staging during the latter part of the period.

K-1501-512 Renaissance Literature I: Prose

3 sh

Major prose writers of the sixteenth century, including Erasmus, More, Castiglione, Sidney, Lyly, Nashe, and Hooker. Attention is given to the development of satire, romance, the picaresque, and utopian fiction.

K-1501-513 Renaissance Literature II: Poetry

3 sh

A study of English poetry of the 16th century, a period of major changes. The principal focus is on poets who contributed to the development of the English lyric (Wyatt, Surrey, Raleigh, Spenser, Sidney, Shakespeare). The unique poetry of Edmund Spenser, particularly *The Faerie Queene*, is also examined.

K-1501-515 Seventeenth Century Literature: Poetry**3 sh**

The poetry of Donne, Jonson, Herbert, Marvell, and Milton, supplemented by historical and intellectual background and by selections from the work of Vaughan, Traherne, Crashaw, Herrick, Suckling, Lovelace, Carew, and Cowley. Stylistic categories such as the metaphysical, the classical, and the meditative are considered in the light of a close critical analysis of the major poetry.

K-1501-516 Seventeenth Century Literature: Prose**3 sh**

English prose between the Elizabethan period and the age of Queen Anne, including the development of prose style and the origins of the short narrative, of scientific writing, and of modern literary criticism. Authors include Milton, Pepys, Bunyan, Walton, Burton, Bacon, Brown, and Aubrey.

K-1501-518 Milton**3 sh**

Paradise Lost, *Paradise Regained*, *Samson Agonistes*, and some of the minor works are analyzed intensively. Milton's styles, themes, and techniques are considered in the light of his life and the political and religious controversies of his times. The poetry is also studied in terms of its relation to Milton's Italian and classical models, his Elizabethan masters, and his contemporaries.

K-1501-520 Restoration and Eighteenth-Century Drama**3 sh**

Heroic, comic, and sentimental drama by playwrights from Dryden to Sheridan with emphasis on their reflection of the literary and social climate. Attention is also given to the physical theater and to the composition of the audience.

K-1501-521 The Augustan Age**3 sh**

The literature of the Restoration and early eighteenth century in its cultural contexts. Topics include criticism and aesthetics, satire, the new nature poetry, and the relationship between literary forms and philosophical and critical ideas. Emphasis on the works of Dryden, Swift, Pope, Gay, Addison and Steele, and Thomson.

K-1501-525 The English Novel from Defoe to Austen**3 sh**

The rise of the English novel and its various traditions: comic, realistic, satirical, psychological, and gothic. Authors include Defoe, Richardson, Fielding, Smollett, Stern, and Austen.

K-1501-529 British Romanticism I: Wordsworth and Coleridge**3 sh**

The poetry of the two most important writers of the first generation of the Romantic movement in England. Emphasis is on the significance of their poetry in the contexts of the poets' own experience and of the age of democratic and industrial revolution.

K-1501-530 British Romanticism II: Byron, Shelly, and Keats**3 sh**

The major works of the second generation Romantics are studied in relation to the experience of their lives and the movements of their time. Attention is also given to their letters and critical writings.

K-1501-531 Victorian Studies I: Prose**3 sh**

The responses of the major prose writers of the period to such issues as the rise of a large working class, the sudden growth of cities, demands for political freedom, and the promises and threats of science. The problems of establishing an aesthetic of nonfiction prose will also be considered. Works by Carlyle, Mill, Arnold, Macaulay, Huxley, Newman, Pater, and Wilde.

K-1501-532 Victorian Studies II: Novel**3 sh**

The Victorian novel in its historical and cultural contexts, with emphasis on the responses of the most vital art form of the age to the unprecedented changes in English life that took place during the era. Words by Thackeray, Trollope, Dickens, the Brontës, Eliot, Meredith, and Gissing.

K-1501-533 Victorian Studies III: Poetry**3 sh**

The course will concentrate on the major mid-Victorian poets, Tennyson, Browning, and Arnold, and to a lesser extent their successors among the Pre-Raphaelites, the Aesthetes, and the Rhymers.

K-1501-535 Hardy, Joyce, and Lawrence**3 sh**

An examination of the fiction of these three writers with special attention to the ways in which their work illuminates the transition to modern fiction, demonstrates the relation between literary consciousness and society, and illustrates the cultural phenomenon of the artist repudiated by society.

K-1501-540 The Modern British Novel**3 sh**

Innovations in characterization, narrative technique, and theme under the impact of major twentieth-century political, economic, and cultural developments. Works by Forster, Huxley, Waugh, Orwell, Greene, Amis, Murdoch, Lessing, and others.

K-1501-542 The Irish Renaissance**3 sh**

The Irish contribution to twentieth-century literature and aesthetic theory, specifically to that brand of experimentation, individualism, and internationalism associated with the idea of the modern. Special attention to W. B. Yeats, James Joyce, J. M. Synge, Sean O'Casey, and Frank O'Connor.

K-1501-600 Seminar in British Literature**3 sh**

Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. Students may repeat the British seminar as long as the topic is different each time. Limit: 12 students. Permission of instructor required.

American Literature

K-1501-550 Studies in Early American Literature**3 sh**

All major and several minor American writers of the seventeenth and eighteenth centuries are studied within several contexts: literary, religious, philosophical, and political. Topics include the development of American literature, 1620-1800; the effects of Puritanism and Deism; the concept of the American Dream; the originality of the founding fathers; and the extent to which modern American literature and culture reflect the colonial heritage.

K-1501-552 American Poetry to 1912**3 sh**

The continuity of American poetry as a national body of literature, with distinctively American themes, subjects, techniques, and critical theories; the shaping influences of English and continental writers; and the impact of American poets on their European contemporaries. Particular emphasis on Poe, Whitman, Emerson, Melville, Dickinson, Crane and Robinson.

K-1501-555 American Romanticism**3 sh**

An exploration of the Romantic Movement in America to its culmination in Transcendentalism. Works by Emerson, Thoreau, Whitman, Irving, Cooper, and Bryant.

K-1501-556 Poe, Hawthorne, and Melville**3 sh**

An intensive examination of the writings of the three "dark romantics" of the American Renaissance, set against their biographical backgrounds and the literary and historical contexts in which they worked.

K-1501-557 American Realism**3 sh**

The development of American realistic fiction, with emphasis on the works of Twain, Howells, and James in relation to their literary heritage.

K-1501-560 Modern American Fiction**3 sh**

After a brief examination of late nineteenth-century realism, the major writers of the twentieth century (up to World War II) are studied with special attention to the critical attitudes of the period and to related scholarship. Authors include Dreiser, Stephen Crane, Sherwood Anderson, Hemingway, and Faulkner.

K-1501-561 Modern American Poetry**3 sh**

Beginning with background material on late nineteenth-century poetry, the course examines selected major modern poets. The changing scene in modern poetry is noted, and the reading of contemporary poets is included. Works by Hart Crane, e. e. cummings, Hilda Doolittle, T. S. Eliot, Robert Lowell, Ezra Pound, Wallace Stevens, and others.

K-1501-563 Recent American Fiction**3 sh**

Fiction of approximately the last twenty years in the context of American culture and the traditions of American fiction. The course analyzes the characteristics of theme, technique, and sensibility that form the basis of a writer's response to the ambiguities of life in the contemporary world. Works by Bellow, Mailer, Roth, Oates, Updike, Didion, O'Connor, Walker, Goodwin, Brautigan, Ellison, Baldwin, and others.

K-1501-564 American Drama**3 sh**

The major American playwrights, such as Eugene O'Neill, Thornton Wilder, Arthur Miller, and Tennessee Williams, are placed in the perspective of their contemporaries and of the traditions of the American stage. Attention is given to the emergence of a truly American theater.

K-1501-601 Seminar in American Literature**3 sh**

Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. Students may repeat the American seminar as long as the topic is different each time. Limit: 12 students. Permission of instructor required.

Comparative Literature

K-1503-512 Literary Criticism to 1800**3 sh**

Plato, Aristotle, Horace, Longinus, and their imitators and interpreters in the Medieval, Renaissance, and Neoclassical periods are studied for those ideas about the nature and value of literature which have been influential in our culture. Considerable attention is given to relating the critical works to the history, art, and principal writings of each period.

K-1503-513 Literary Criticism from 1800 to the Present**3 sh**

The break from classical theory (notably by the Romantics) and the search, principally in our own day, for new definitions of the nature and function of literature. Throughout the course, critical theory is related to the history, art, and principal writings of each period. Prerequisite: 1503-512 or permission of the instructor.

K-1503-515 Ancient Tragedy**3 sh**

Selected plays of Aeschylus, Sophocles, Euripides, and Seneca in English translation; origins of Greek and Roman tragedy; religion and myth in tragedy; Aristotelian criticism; stage production; the influence of ancient tragedy on modern literature.

K-1503-516 Ancient Comedy**3 sh**

Reading, discussion, comparison, and criticism of selected plays of Aristophanes, Menander, Plautus, and Terence in English translation. Origins and development, staging, and theories of Old and New Comedy at Athens and of Roman Comedy; mime, farce; influences on later comedy.

K-1503-517 Ancient Epic**3 sh**

The *Iliad*, *Odyssey*, and *Aeneid* in English translation. Ancient and modern literary criticism of Homer and Virgil; oral versus literary epic; history, folklore, and saga in the ancient epic; basic epic themes (man as hero, fate, man and the gods, etc.); Homeric and Virgilian influence on subsequent literature.

K-1503-535 The Enlightenment in Europe**3 sh**

A comparative study of literature and ideas in eighteenth-century Europe, the course focuses on English, French, and German literature, with some attention to others, including Italian and Spanish. Major literary and philosophical trends are analyzed, including the rational and satirical attack on traditional values and the current of "sensibility" which stressed the powers of the emotions and the senses. Works by Swift, Voltaire, Fielding, Diderot, Johnson, Rousseau, Prévost, Goethe, Lessing, and others.

K-1503-536 The Romantic Movement**3 sh**

The origins and development of Romanticism in England and Germany are compared with the later triumph of the movement in France. Representative works of Chateaubriand, Goethe, Novalis, Kleist, Hoffmann, Heine, Musset, and Nerval are studied, and their themes compared with those of the English Romantics.

K-1503-565 Ibsen, Strindberg, and Shaw**3 sh**

Three great forerunners of twentieth-century drama are studied intensively.

K-1503-569 Major Neo-African Writers**3 sh**

Literary analysis of the most accomplished modern authors of African descent in the light of European, American, and African scholarship. Works by Machado de Assis, Sterling A. Brown, Aimé Césaire, Paul Lawrence Dunbar, Leopold Senghor, Gwendolyn Brooks, Nathan Scott, and others.

K-1503-570 The Modern Novel**3 sh**

Selected works by European, English, and Latin American masters, illustrating the evolution of the novel during the twentieth century and the development in fiction of modern concepts of space, time, dreams, and psychology. Works by James, Proust, Kafka, Dos Passos, Woolf, Gide, Mann, Hesse, Stein, Beckett, and others.

K-1503-571 Trends in the Contemporary Novel**3 sh**

A study of eight to twelve novels written since 1950 in English, French, German, Spanish, and Italian. The selections will be distributed evenly among the languages. Emphasis will be upon literary trends common to the contemporary novel regardless of the language in which it is written. Representative authors are Fowles, Ellison, Cortazar, García Márquez, Goytisolo, Sollers, Duras, Böll, Frisch, and Moravia.

K-1503-575 Myth: Origins and Development**3 sh**

Selected world mythologies, both Occidental and Oriental, are studied comparatively against a background of theories concerning their origins, development, symbols, and motifs, as well as their significance to literary and interdisciplinary studies. Emphasis on the archetypal and related theories. The first of a two-part course, but may be taken as complete in itself.

K-1503-576 Myth: Theory and Practice**3 sh**

The theoretical and mythic backgrounds from 1503:575 are applied to the study of archetypal and related criticism and to literary analysis. The creative process and the origins of literary form, theme, character, genre, imagery, and tone are intensively explored.

Prerequisite: 1503-575.

K-1503-577 Film Studies**3 sh**

On a rotating basis, different cultural and historical aspects of American, British, or World film are examined. See current announcement. Students may repeat Film Studies as long as the topic is different each time.

K-1503-602 Seminar in Comparative Literature**3 sh**

Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. Students may repeat the Comparative Seminar as long as the topic is different each time. Limit: 12 students.

Permission of instructor required.

English Education

K-1501-580 Recent Research and Experiment in the Teaching of English **3 sh**

A workshop that aims to apprise students of recent research, thought, and practice in the various areas of English teaching, with emphasis on the secondary school.

K-1501-581 Studies in Communication Skills**3 sh**

Opportunity for teachers to study both traditional and newer theories and methods of teaching writing and research skills, and to develop and test instructional materials for use in their own classrooms.

Seminars and Thesis

K-4903-603 Seminar in Computers in the Humanities**3 sh**

Types of literary research suitable for analysis by computer techniques, including linguistic chronology, linguistic geography, authenticity and attribution, stylistic analysis, and computer-assisted instruction. Elementary programming and a computer research project.

Limit: 12 students. Permission of instructor required.

K-1501-605 Seminar in Literary Research**3 sh**

Instruction and practical experience in such areas as reference sources, textual study, kinds of criticism, and the basics of editing. Recommended for the first or second semester of graduate study.

Limit: 12 students. Permission of instructor required.

**K-1501-606 Thesis Writing****3 sh**

Working closely with a research advisor, the student conducts a scholarly investigation and completes an acceptable Master's thesis.

Permission of Graduate Advisor required.

FRENCH

Graduate Advisor: Professor Madeleine Sergent

Department Chairman: Dr. Helene Klibbe

The graduate program in French is designed to prepare students for both teaching and research in language and literature.

A Master of Arts degree opens opportunities to teach in both community colleges and high schools, and provides a solid foundation for students interested in continuing their studies toward a Doctor of Philosophy degree. Graduate training in French is also increasingly useful for positions in government and industries concerned with French-speaking areas of the world.

Admission Requirements

Admission is open to students who hold a bachelor's degree and have completed at least 24 semester hours of undergraduate French or its equivalent. Students applying for admission are required to present their Graduate Record Examination scores for the Advanced Test in French in addition to the standard College requirements for admission to graduate study.

After acceptance, the candidates will consult the graduate advisor to plan their programs. The course program must be approved by the graduate advisor each semester before registration.

Individuals holding the bachelor's degree and showing an adequate proficiency in French may enroll in graduate courses, even though they do not wish to enter the Master of Arts program.

Requirements for the Master of Arts Degree in French

I.	Required Courses	6 semester hours
	1002-505 History of the French Language	3
	1102-603 Research Seminar	3
	(Waived if student elects to write a thesis)	
II.	French Electives	
	1102-506 Advanced French Phonetics	3
	1102-508 Explication de Texte and Stylistic Analysis	3
	1102-511 Medieval French Literature	3
	1102-513 Medieval French Theater	3
	1102-516 French Humanism in the Sixteenth Century	3
	1102-517 Poetry of the Renaissance	3
	1102-525 Moralists of the Seventeenth Century	3
	1102-526 Corneille, Racine and Moliere	3
	1102-527 Selected Topics in Seventeenth Century French Literature	3
	1102-530 Philosophy and Politics in Eighteenth Century France	3
	1102-531 The Development of the Novel in Eighteenth Century France	3
	1102-532 Eighteenth Century Seminar	3
	1102-537 Nineteenth Century French Theater	3
	1102-538 French Novel of the Nineteenth Century I	3

1102-539	French Novel of the Nineteenth Century II	3
1102-540	Nineteenth Century French Poetry	3
1102-542	Twentieth Century French Theater	3
1102-543	Twentieth Century French Poets	3
1102-544	Twentieth Century French Novel I	3
1102-545	Twentieth Century French Novel II	3
1102-546	Current Directions in the French Novel	3
1102-548	Contemporary French Civilization: Selected topics	3

These courses will be offered on a rotating schedule to enable students to fulfill the requirements for a Master's degree within two years, summer sessions included.

- III. Free Electives 6 semester hours
- IV Thesis (optional) 4, on approval
- V. Comprehensive Examination: Two sessions of 2 hours each.
 - a) A 2-hour written exam covering stylistics, explication de texte and French civilization.
 - b) A 2-hour written essay on a literary topic selected from a previously announced list of subjects. The exam is based on a reading list and course content.

Minimum: 33 semester hours

FRENCH

Course Descriptions

- L-1102-505 History of the French Language** **3 sh**
Structures of modern French as outcome of linguistic and cultural processes over 2,000 years.
- L-1102-506 Advanced French Phonetics** **3 sh**
Principles of general and experimental phonetics. Previous knowledge of phonetics desirable.
- L-1102-0508 Explication de Texte and Stylistic Analysis** **3 sh**
Instruction in the techniques of explication de texte and stylistic analysis as both an instrument for the development of critical reading ability and as a pedagogical tool for the teaching of literature as well as of language through literature.
- L-1102-511 Medieval French Literature** **3 sh**
French Literature from 9th through 15th centuries, emphasizing the "Chanson de Geste" and the "Roman Courtois."
- L-1102-513 Medieval Theater** **3 sh**
Origins and development of theater in France during the Middle Ages.
- L-1102-516 French Humanism in the Sixteenth Century** **3 sh**
Humanistic ideals as reflected in the works of Rabelais, Montaigne, and other authors.
- L-1102-517 Poetry of the Renaissance** **3 sh**
Major works of Marot, Ronsard, du Bellay and other poets of the Pleiade.

- L-1102-525 Moralists of the Seventeenth Century** 3 sh
Representative works of Descartes, Pascal, La Rochefoucauld, Saint Simon, La Bruyere, and other authors.
- L-1102-526 Corneille, Racine and Moliere** 3 sh
Dramatic art as reflected in representative plays of the three authors.
- L-1102-527 Selected Topics in Seventeenth Century French Literature** 3 sh
Changing topics to include in-depth studies of individual authors.
- L-1102-530 Philosophy and Politics in Eighteenth Century France** 3 sh
The impact of the "philosophies" on the revolution in religion and political and sociological thought.
- L-1102-531 The Development of the Novel in Eighteenth Century France** 3 sh
Study of the social and historical context of a novel and its particular form (e.g. epistolary, episodic, etc.)
- L-1102-532 Eighteenth Century Seminar** 3 sh
Changing topics to include in-depth studies of individual authors and genre topics.
- L-1102-537 Nineteenth Century French Theater** 3 sh
Hugo's dramatic theories and their application in representative plays.
- L-1102-538 French Novel of the Nineteenth Century I** 3 sh
Insight into major works of Balzac and Stendhal.
- L-1102-539 French Novel of the Nineteenth Century II** 3 sh
Insight into major works of Flaubert and Zola.
- L-1102-540 Nineteenth Century French Poetry** 3 sh
Development of French poetry from Romanticism to Symbolism.
- L-1102-542 Twentieth Century Theater** 3 sh
Major modern currents and trends in drama.
- L-1102-543 Twentieth Century Poets** 3 sh
Emphasis upon thematic and structural analysis of work of Apollinaire, Reverdy, Char, Eluard and Bonnefoy.
- L-1102-544 Twentieth Century Novel I** 3 sh
Evolution of the French novel: Proust, Gide, Mauriac and other authors.
- L-1102-545 Twentieth Century Novel II** 3 sh
Evolution of the French Novel: Malraux, Sartre, Camus, and other authors.
- L-1102-546 Current Directions in the French Novel** 3 sh
Analysis of current developments in the French novel and its criticism.
- L-1102-0548 Contemporary French Civilization: Selected Topics** 3 sh
The course acquaints students with the institutions and culture of contemporary France.
- L-1102-603 Research Seminar** 3 sh
Opportunity to apply research techniques on a specific topic of the student's choice.
- L-1503-536 The Romantic Movement** 3 sh
Comparative approach to the study of romanticism in England, Germany and France. (Taught in English. Recommended to French majors as a free elective.)

The following courses are offered as remedial work for students requiring supplementary language preparation. These courses carry no graduate credit. Course descriptions may be found in the current undergraduate bulletin.

- 1102-250 Advanced Composition
- 1102-472 French Language Workshop

SPANISH

Graduate Advisor and Department Chairman: Dr. Norman Fulton

The program is designed to prepare students for research in language and literature, and for professional positions demanding a knowledge of Spanish: interpreters; translators; consular service and diplomatic service in Spanish-speaking countries; Spanish newspaper and magazine editors; organizers of projects for Spanish-speaking communities; and representatives of commercial companies in Spain and Spanish America. The Master of Arts degree opens opportunities to teach in colleges and universities.

Admission Requirements

The Master of Arts program in Spanish is open to students who have completed at least 24 semester hours or the equivalent of undergraduate Spanish and hold a bachelor's degree. These students must take the Graduate Record Examination in Spanish prior to acceptance into the program.

Students who hold a bachelor's degree or its equivalent may enroll in graduate courses without obligation to follow a Master's degree program, if they have 24 credit hours or the equivalent in Spanish.

After acceptance, candidates will consult the graduate advisor to plan their programs.

Requirements for the Master of Arts Degree in Spanish

- I. Required Courses..... 6 semester hours
 - 1105-505 History of the Spanish Language 3
 - 1105-506 Spanish Dialectology of the Americas 3
- II. Primary Field of Specialization* 18 semester hours
- III. Secondary Field of Specialization* 9 semester hours

* Students elect either Peninsular or Spanish-American area as a primary field; the other area becomes a secondary field of specialization. Specific course selection to be made with the approval of the Graduate Advisor.

- IV. Comprehensive Examination or Research. Upon completion of 33 semester hours, the candidate may apply for a comprehensive examination, which covers the literature of the student's major field of specialization, with the understanding that he will devote either one semester or a summer in preparation for the examination.

The candidate may elect 1105-603, Research, for 3 semester hours credit in lieu of the comprehensive examination. For full details please see the graduate advisor.

Minimum: 33-36 semester hours

SPANISH

Course Descriptions

P-1105-505 History of the Spanish Language **3 sh**
The Spanish language from its origins to the present. Phonological, structural and lexical

evolution from vulgar Latin, following the process of transformation from its first documentary appearance.

P-1105-0506 Spanish Dialectology of the Americas **3 sh**

This course acquaints the student with the various dialects of Spanish found in America. The student learns to recognize, characterize and describe accurately the various dialects discussed. Lectures are presented on each dialect with student discussion following. Taped conversations representing the various dialects are then played and discussed. Prerequisite: 1105-505.

P-1105-603 Research **3 sh**

Course designed to provide an opportunity for graduate students in Spanish to investigate and apply techniques of research. Students will write a major paper in the area of their field of specialization.

Prerequisite: Completion of at least 15 hours in the major field of specialization.

Peninsular Area

P-1105-516 Medieval Spanish Literature to XV Century **3 sh**

An analysis of outstanding works from the 11th Century jarchas and cantarcillos de amigo to the advent of Renaissance.

P-1105-521 Pre-Renaissance and Pre-Lopista Theater **3 sh**

Origins and developments of the Spanish Theater to the beginning of the Golden Age; thematic study of major playwrights including Juan del Encina, Lucas Fernandez, Gil Vicente and Torres Naharro.

P-1105-522 Theater of the Golden Age **3 sh**

Structural and thematic study of the comedia through readings and discussion of representative plays of the period including Lope, Tirso, Calderon, Alarcon and Moreto.

P-1105-523 Prose and Poetry of the Golden Age **3 sh**

Critical readings of the picaresque and pastoral novels, humanistic writings of Luis Vives, Alfonso and Juan Valdes, and Gracian; textual analysis of the poetry of the Renaissance and Baroque from Garcilaso to Quevedo.

P-1105-524 Cervantes **3 sh**

The prose writings and drama of Cervantes focusing on his unique artistic achievement. Readings of *El Quijote*; *Novelas Ejemplares*; *Parsiles y Segismunda*, his comedias, entremeses.

P-1105-525 La Ilustracion and Romanticism **3 sh**

The erudition of the enlightenment as symbolized by Feijoo, Jovellanos; Neoclassicism; the romantic movement exemplified by Larra, el Duque de Rivas, Espronceda, Garcia Gutierrez, Zorrilla, Alarcon; costumbrismo.

P-1105-0526 Realism in Spain **3 sh**

Problems germane to 19th century Spain, as shown by Fernan Caballero, Pereda, Blasco Ibanez. Particular emphasis upon the works of Perez Galdos.

P-1105-0527 The Generation of '98 **3 sh**

A reprobing into the roots of Spain through the works of Unamuno, "Azorin," Baroja, Valle-Inclan, Benavente, Ortega y Gasset and Maeztu.

P-1105-0533 Contemporary Spanish Theater 3 sh

Representative plays from Benavente to Sastre read and analyzed. Critical study of the evolution of theater in light of style, technique and thought of these playwrights.

P-1105-0534 Spanish Prose of the Twentieth Century 3 sh

Works of the Generations of 1927 and 1936: Lorca, Casona. Trends in contemporary prose: Buero Vallejo, Sastre, Cela, Zuzunegui, Delibes, Goytisolo, Laforet, Matute and selected younger writers of the present generation.

P-1105-0535 Contemporary Spanish Poetry 3 sh

Unamuno, Machado, Jimenez; the poetry of the "Generation of '27" and selective readings of younger poets of today. Emphasis on textual analysis.

Spanish-American Area

P-1105-540 Colonial Spanish-American Literature 3 sh

Indigenous literature such as the Popol Vuh, Rabinal Achi, and nahuatl and quechua poetry. The chronicles, the Inca Garcilaso and epic poetry. Sor Juana Ines de la Cruz and Concolorcorvo.

P-1105-541 Spanish-American Literature of the Nineteenth Century 3 sh

The evolution from Neoclassicism and Romanticism to Naturalism and Realism in prose and poetry. Fernandez de Lizardi, Heredia, La Avellaneda, Matto de Turner, Sarmiento and the gaucho poets.

P-1105-542 Spanish-American Novel of the Twentieth Century 3 sh

Study of the aesthetic novels of Modernismo, novels of Mexican Revolution, psychological novel and novel of the land and of social reform.

P-1105-543 Spanish-American Theater of the Twentieth Century 3 sh

New trends in the Spanish-American theater—the theater of the absurd and the theater of cruelty, and the fantastic. Readings of such representative playwrights as Emilio Carballido, Carlos Solorzano, Elena Garro, Osvaldo Dragun, Griselda Gambaro.

P-1105-546 Modernismo in Spanish America 3 sh

Critical evaluation of the "Modernista" movement in Spanish-American poetry and prose (1870-1920). The genesis, technique, characteristics and principal writers of the movement.

P-1105-548 Contemporary Spanish-American Novel 3 sh

Critical examination of representative works of contemporary writing in Spanish America. The relation of the Spanish-American novel to the genre in Europe, Spain and North America.

Prerequisite: 1105-542

P-1105-549 Contemporary Spanish-American Short Story 3 sh

Study of the tendencies in the contemporary short story from the Post-Modernist period; realism and fantasy; the short story as a social document.

P-1105-551 Contemporary Spanish-American Poetry 3 sh

Individual works of poetry as autonomous linguistic and artistic creations and as part of a general renaissance in culture. Post-modernism, vanguardism and post-vanguardism.

P-1105-560 Topics in Spanish-American Literature**3 sh**

Selected specialized topic, either of a period, genre, or particular author, in Spanish-American literature. Topic will change with each offering.

Italian Courses**P-1105-0570 Petrarch and Boccaccio: The Waning of the Middle Ages and the Foundations of the Humanistic Culture****3 sh**

Medieval literary traditions, in particular of the genres of lyric poetry and short story. Petrarch and Boccaccio as founders of humanistic culture; their philosophical, devotional and scholarly writings. The Italian poetry of Petrarch, *Canzoniere* and *Trionfi*. Boccaccio's *Decameron*.

P-1105-0572 Literary and Philosophical Traditions in Dante's Divine Comedy**3 sh**

Discussion of specific themes of the *Divine Comedy*, such as Dante's conception of history, idea of physical world, theories on light and music, medieval tradition of classicism, prophetic and eschatological literature. Examination of these issues in the light of their historical tradition as well as in Dante's personal interpretation.

P-1105-0574 Machiavelli and Renaissance Thought**3 sh**

Italy in the age of the Signorie. Machiavelli's and Guicciardini's writings and their impact on European culture and thought. Interpretation and evaluation of their works.

SCHOOL OF MATHEMATICS AND SCIENCE

Richard A. Lynde, Ph.D., Interim Dean

Graduate programs leading to Master of Arts degrees in Biology, Chemistry, Geoscience, and Mathematics are available within the School of Mathematics and Science.

The programs are designed to provide an opportunity for advanced study in the mathematical and natural sciences, and, where appropriate, for original research. While strongly discipline oriented, the programs retain the flexibility to satisfy the requirements of a diverse student body. Concentrations in Pure and Applied Mathematics, Computer Science, Statistics, and Mathematics Education within the mathematics program and a combination of required courses and free electives in each program enable students to design courses of study which will enhance their professional qualifications for continued or initial employment in business and industry, government service, or secondary school teaching. In addition, the graduate program has successfully prepared students for graduate study at the Ph.D. level and for medical school.

The concept of continuing education is particularly important in the rapidly changing mathematical and natural sciences. The School of Mathematics and Science is committed to providing an opportunity within the graduate program for mathematicians and scientists to selectively up-date their knowledge and skills. In an effort to provide students with additional opportunities for professional advancement, the Mathematics Department has developed an understanding with the Department of Mathematics, Statistics, and Computing in Education of Teachers College/Columbia University under which up to 45 semester hours of Montclair State graduate mathematics credit may be applied toward the requirements for an Ed.D. in Mathematics Education from Teachers College.

In addition to the laboratory facilities and equipment available in Mallory and Finley Halls and the Mathematics and Science Building, the School has ample access to the facilities of the N.J. Educational Computer Network. The School is a charter member of the N.J. Marine Science Consortium and has access to its facilities and instructional program.

BIOLOGY

Graduate Advisor: Dr. Leah Koditschek

Department Chairman: Dr. Paul P. Shubeck

The graduate programs in the biology department are designed to enable a student to develop his or her preparation for a career in biological fields requiring advanced training or for the teaching profession.

Admission Requirements

Prior to matriculation for the Master of Arts degree in biology, the student should have completed a subject matter of at least twenty-four semester hours in biology and have adequate preparation in college chemistry, mathematics and physics.

In cases where there has been a weak undergraduate program in the major and/or collateral fields, prerequisite courses, which will not count towards graduate credit, may be assigned.

Requirements for the Master of Arts Degree in Biology

Students in the teaching fields may use six semester hours of approval electives for the selection of graduate courses in the area of professional education.

The work program of the student is prepared in cooperation with the biology graduate advisor. Any changes in the program can be made only with the written approval of the graduate advisor. The student should keep the advisor informed of his/her progress in the program.

- I. Specialization.....22-26 semester hours
 - A. The candidate must complete the research requirement by taking one of the alternatives listed below:
 1. Master's Thesis..... Credit by arrangement
 2. 0401-514 Biological Problems of Society.....3
 - B. The candidate must complete a minimum of 16 semester hours within the biology department at the Upper Montclair campus.
- II. Electives.....6-10 semester hours
To be selected with approval of the graduate advisor.
- III. Comprehensive Examination

Minimum: 32 semester hours

BIOLOGY

Course Descriptions

Q-0401-510 The Teaching of Biology in Secondary Schools **3 sh**

Seminar and research course designed for study of methods and practices being used in teaching of secondary school biology.

Prerequisite: 16 semester hours in biology.

Q-0401-511 Histology and Histological Techniques **4 sh**

Structural characteristics of cells and their specialization according to function; the organization of cells into the tissues and organs of the intact form; basic procedures for the preparation of tissue sections and permanent mounts (2 hours lecture, 4 hours laboratory).

Prerequisite: 8 semester hours in biology.

Q-0401-512 Advanced Genetics **3 sh**

Seminar course. Genetics of microorganisms, molecular genetics, developmental genetics, non-nuclear genetic phenomena.

Prerequisites: 1 semester Biochemistry 1401-412; Genetics.

Q-0499-513 Instrumentation and Techniques for Biological Science **4 sh**

Modern analytical and research techniques in biology, including manometry, spectrophotometry, electrophoresis, chromatography, microbial batch growth and assay techniques, immunotechniques and evaluation of experimental design and data (2 hours lecture, 4 hours laboratory).

Prerequisites: General chemistry, general physics, organic chemistry and an adequate background in biology or permission of the staff. Analytical chemistry or biochemistry desirable.

Q-0401-514 Biological Problems of Society

3 sh

Seminar. Students will investigate and discuss environmental problems reported in recent scientific publications.

Prerequisite: Matriculation for M.A. degree in biology or permission of instructor. Comprehensive examination for the Master's degree in biology will be based on this course.

Q-0401-515 Radiation Biology

3 sh

The biologic effects of ionizing radiations (3 hours lecture, 4 hours laboratory).

Prerequisites: 20 credits of biology. One year of physics recommended and 1905-230 and 231 Organic Chemistry I and II.

Q-0401-516 Biogeography

3 sh

Distribution of plants and animals of the world on continents and continental and oceanic islands and in various climatic zones.

Prerequisites: 8 semester hours botany; 8 semester hours zoology, including vertebrate zoology; 3 semester hours physical geography.

Q-0401-520 Plant Physiology

4 sh

Investigation of physiology of plants. Plant growth, development and reproduction as well as the new advances in plant physiology. Water relations of plants, mineral nutrition, physiological significance of soil and soil moisture, photosynthesis, respiration, plant biosynthesis and dynamics of growth (2 hours lecture, 4 hours laboratory).

Prerequisites: Organic chemistry, general botany or permission of the instructor.

Q-0401-521 Field Studies of Flowering Plants

4 sh

The taxonomy, evolutionary trends and ecological adaptations of the Gymnosperms and Angiosperms. A variety of habitats will be visited and analyzed (3 hours lecture, 3 hours laboratory).

Prerequisites: 1 year of botany and field experience in ecology.

Q-0401-522 Plant Pathology

3 sh

Causes, symptoms, impact on man's food supply and control of plant diseases.

Prerequisites: Microbiology, 1 year Botany or approval of instructor (2 hours lecture, 2 hours laboratory).

Q-0401-523 Mycology

3 sh

Identification, classification of fungi and their place in the ecosystem (2 hours lecture, 2 hours laboratory).

Prerequisites: Microbiology, 1 year of Botany or approval of instructor.

Q-0401-530 Animal Behavior

4 sh

Patterns and mechanisms of behavioral responses to changes in the internal and external environments. Among the topics considered are orientation, reproduction, communication, development and behavior genetics (3 hours lecture, 3 hours laboratory).

Prerequisites: 16 semester hours in Zoology or a course in each of the following: One year of Zoology, Comparative Psychology and Physiological Psychology. Spring only.

Q-0401-531 Medical Parasitology**3 sh**

General biology, ecology, classification and control of protozoa and helminths parasitic in man and domestic animals (2 hours lecture, 2 hours laboratory).

Q-0401-532 Insect Ecology and Behavior**3 sh**

This course considers (1) the relationship of insects to their environment, (2) insect populations, (3) insect behavior.

Prerequisite: A course in general entomology.

Q-0401-540 Comparative Human Anatomy**4 sh**

Man's physical, physiological and behavioral aspects in the framework and by the methodological approach of comparative anatomy (2 hours lecture, 4 hours laboratory).

Prerequisites: A year course in general zoology and a course in human anatomy and physiology.

Q-0401-541, 542 Experimental Embryology and Cellular Differentiation I, II 2 sh ea.

Seminar on experimental studies that have led to present knowledge of developmental processes. Discussion of studies by classical embryologists with emphasis on relevance of their ideas to modern concepts of development. Special topics of embryology; regulative vs. mosaic development, induction, morphogenetic movement, fields and gradients. Modern techniques and studies: nuclear transplantation, chromosome differentiation, in vitro studies of cell disaggregation and reaggregation.

Prerequisites: Basic Embryology; One course each in General Biology or Zoology.

Q-0401-543 Comparative Immunology**3 sh**

The phylogeny and investigation of immune defense mechanisms (3 hours lecture).

Prerequisites: 24 hours in Biology; Immunology, 8 hours of chemistry, or permission of the instructor.

Q-0401-544 Comparative Animal Physiology**4 sh**

The physiological mechanisms involved in the varied responses of both vertebrates and invertebrates to critical fluctuations of their physio-chemical environment (3 hours lecture, 3 hours laboratory).

Prerequisites: Degree in biology, including Cell Biology, General (or Human) Physiology, and one year of Zoology.

Q-0401-545 Experimental Endocrinology**3 sh**

A seminar and laboratory course in endocrinology in which the various endocrine glands will be surgically removed or chemically destroyed and the morphologic and physiologic effects measured and observed.

Prerequisites: 24 hours in Biology; Endocrinology or Human Physiology.

Q-0401-550 Topics in Microbiology**4 sh**

Selected topics in microbiology of special interest from both theoretical and technological point of view, such as, microbial metabolism, microbial cell-free systems, genetics, antibiotic action, bacteriophage, virus and cancer, etc.

Required: General Microbiology, Organic Chemistry, Cell Biology. Also desirable: Intermediary Metabolism and Advanced Microbiology.

Q-0401-551 Intermediary Metabolism I**2 sh**

Discussion of interrelationships of catabolic and anabolic paths.

Prerequisites: One year of Organic Chemistry and Biology; Biochemistry or Cell Physiology or equivalent.

Q-0401-552 Intermediary Metabolism II

2 sh

Biological cycles, unity and diversity in metabolic paths, metabolic evolution, metabolic control mechanisms and other special topics.

Prerequisite: Intermediary Metabolism I or equivalent.

Q-0401-553 Microbial Ecology

4 sh

Exploration of the essential role of microorganisms in the eco-system. Lecture, field trips and laboratory will demonstrate the ubiquitous and highly adaptive evolution of microorganisms, their inter-relationships and their profound influence on the biosphere (3 hours lecture, 3 hours laboratory).

Prerequisites: General Botany, General Chemistry, Elementary Microbiology or Mycology.

Q-0401-570 Ecology

3 sh

Basic ecological principles and concepts. Habitat approach to field exercises in fresh water and terrestrial ecology. Intra and interspecific relationships with all living members of the eco-system; problems in plant and animal ecology and appropriate research in the field and library (2 hours lecture, 2 hours laboratory).

Prerequisite: General Botany, General Zoology, Plant Taxonomy or equivalent, some physical science.

Q-0401-571 Physiological Plant Ecology

4 sh

Field and laboratory studies including methods of vegetation analysis with emphasis on autoecological techniques (2 hours lecture, 4 hours laboratory).

Prerequisite: Ecology, New Jersey Flora or equivalent, or permission of the instructor.

Q-0401-572 Ecology of the Estuary

4 sh

Important biotic, chemical and physical parameters of New Jersey's estuaries. Evolution and successional trends of estuarine communities. Ecology of individual communities studied by field trips to Delaware Bay shore and to some Atlantic coast bays, marshes and offshore barrier islands. Also offered at the New Jersey Marine Sciences Consortium (2 hours lecture, 3 hours laboratory).

Prerequisites: Invertebrate Zoology, Plant Kingdom, one year of Chemistry, or permission of the instructor.

Q-0401-573 Benthic Ecology

4 sh

Community structure, trophic dynamics, species diversity and distribution of bottom dwelling organisms in relationship to their environment, lectures, laboratory work and field investigations of the marine benthos (1 hour lecture, 6 hours laboratory).

Prerequisites: Invertebrate Zoology, Plant Kingdom, degree in Biology or consent of the Instructor.

Q-0401-600 Thesis Research in Biology

3-7 sh

This course is designed to encourage supervised graduate research in a well-defined area of Biology.

Prerequisites: Approval of Department Chairman and Graduate Advisor, as well as Faculty Sponsor who will supervise research.

Q-0499-505 Bacteriological Techniques in Marine Sampling

2 sh

Standard methods of bacteriological water analysis, including MPN and membrane filtra-

tion. Special problems relating to sampling and analysis of marine sediments, surface and subsurface marine waters.

Prerequisites: General Biology, General Chemistry, Microbiology.

Q-1999-564 Benthic Ecology **4 sh**

Community structure, trophic dynamics, species diversity and distribution of bottom dwelling organisms in relationship to their environment; lectures, laboratory work and field investigations of the marine benthos. Offered at NJ Marine Sciences Consortium. (1 hour lecture, 6 hours laboratory).

Prerequisites: Invertebrate Zoology, Plant Kingdom, degree in Biology or consent of Instructor.

Q-1999-565 Tidal Marsh Ecology **4 sh**

Salt marsh development and physiography: community structure, energetics, and inter-relationships. The role of salt marshes in estuarine and marine systems. The impact of man on the marsh. Offered at NJ Marine Sciences Consortium. (3 hours lecture, 3 hours laboratory).

Prerequisite: Degree in biology including some course work in marine biology.

Q-1999-592 Bacteriological Techniques in Marine Sampling **2 sh**

Standard methods of bacteriological water analysis, including MPN and membrane filtration. Special problems related to sampling and analysis of marine sediments, surface and sub-surface marine waters. NJ Marine Sciences Consortium.

Prerequisite: General biology, general chemistry, microbiology.

The following Senior-Graduate courses may be elected with the permission of the Graduate Advisor:

0401-408	Ultrastructural Interpretation	3
0401-410	Biological Science Demonstrations.	4
0401-411	Introduction to Electron Microscopy.	4
0401-412	Genetics	4
0401-413	Field Studies in Sciences: Biological.	2
0401-414	Problems in Field Studies in Biology	2
0415-416	Modern Biology I and II.	4 each
0415-417	Evolution and Systematics	3
0415-418	Biology Independent Study	1-4
0415-419	History and Philosophy of the Life Sciences.	2
0415-420	Economic Botany	3
0415-424	Morphology of Flowering Plants	4
0415-425	Elementary Plant Physiology	4
0415-426	New Jersey Flora.	4
0415-430	Field Ornithology	3
0415-431	Entomology	3
0415-432	Medical Entomology.	2
0415-440	Mammalian Anatomy and Histology	4
0415-441	Comparative Anatomy of the Vertebrates	4
0415-442	Human Physiology	4
0415-443	Comparative Vertebrate Embryology	4
0415-444	Cell Physiology.	5



0415-445	Immunology.....	3
0415-446	Endocrinology.....	3
0415-451	Bacterial Physiology	4
0415-460	Biological Oceanography	3
0415-461	Limnology	3
0415-467	Biology of the Fishes.....	4
0499-404	Plant and Animal Histological Techniques.....	3
0499-405	Cell Culture.....	3
1999-422	Biology of Marine Plankton	4
1999-431	Marine Invertebrate Zoology	4
1999-433	Seashore Ornithology	2
1999-438	Seashore Entomology	2
1999-450	Marine Botany	4
1999-460	Advanced Marine Biology.....	4
1999-490	Field Methods in Oceanography and Marine Biology.....	1
1999-491	Techniques in Plankton Sampling and Analysis.....	1
1999-494	Primary Production of the Marine Environment: Techniques and Measurements.....	1

CHEMISTRY

Graduate Advisor: Dr. Joseph F. Becker

Department Chairman: Dr. John L. Isidor

The chemistry department offers an individualized graduate program designed for the student's academic background and specific purposes and needs. Individualized programs may include advanced level chemistry courses to provide depth in one area of chemistry, or advanced level courses in several areas of chemistry as well as graduate level courses in the allied sciences or mathematics.

Admission Requirements

The minimum requirements of the Graduate Division as set forth in this bulletin (Admission to Graduate Study) are required for admission to the graduate program in chemistry. When the student is admitted to the Graduate Division, the chemistry advisor will evaluate the background in chemistry, other sciences and mathematics and a specific program will be designed. An entering student should present at least twenty-four semester hours of undergraduate chemistry credits. In consultation with the chemistry advisor, a program may be designed for students with less background to include prerequisites. Candidates for the Master's degree in chemistry should seek the guidance of the chemistry advisor in selecting the six hours of free electives.

Requirements for the Master of Arts Degree in Chemistry

- I. Specialization 26 semester hours
 - A. Courses in Chemistry at the 500 level or above 15
 - B. Research: One of the following:
 - 1905-599 Graduate Literature Search in Chemistry 2
 - or
 - 1905-595 Graduate Research and 1905-600 Thesis 4 or 6
 - C. Graduate Level Electives in Sciences or Mathematics 5-9 semester hours
- II. Graduate Level Free Electives 6 semester hours
- III. Comprehensive Examination

Minimum: 32 semester hours

CHEMISTRY

Course Descriptions

R-1905-521 Advanced Theoretical Inorganic Chemistry 3 sh

Current theories of inorganic structure, reactions and properties.

Prerequisites: 1905-341 Physical Chemistry II, 1905-423 Principles of Theoretical Inorganic Chemistry or equivalents.

R-1905-531 Advanced Theoretical Organic Chemistry 3 sh

Modern theories of organic chemistry with emphasis on electronic theory and reaction mechanisms.

Prerequisite: 1905-430 Advanced Organic Chemistry or equivalent.

R-1905-532 Organic Synthesis**3 sh**

Detailed study of the art, methods, and the philosophy of organic synthesis beginning with a review of classical and modern synthetic methods, followed by the planning theory of synthesis and culminating in a study of elegant synthesis in the literature.

Prerequisite: 1905-430 Advanced Organic Chemistry or equivalent.

R-1905-540 Chemical Thermodynamics**3 sh**

In-depth study of classical thermodynamics. Development of thermodynamic functions describing chemical systems in equilibrium with emphasis on systems of variable composition.

Prerequisites: 1905-341 Physical Chemistry II, 1701-315 Applied Differential Equations or equivalents.

R-1905-542 Theoretical Physical Chemistry**3 sh**

Theoretical development of quantum mechanics and statistical mechanics as applied chemistry. Application of theoretical procedures to atomic and molecular structure and bonding.

Prerequisites: 1905-341 Physical Chemistry II, 1701-315 Applied Differential Equations or equivalents.

R-1905-544 Electrochemistry**3 sh**

Principles and application of electrochemistry as related to research and production problems.

Prerequisites: 1905-341 Physical Chemistry II, 1970-343 Experimental Physical Chemistry II.

R-1905-546 Chemical Spectroscopy**3 sh**

Introduction to the theory and experimental techniques of molecular spectroscopy.

Prerequisite: 1905-341 Physical Chemistry II or equivalent.

R-1905-548 Chemical Kinetics**3 sh**

Kinetics in its role of elucidating reaction mechanisms. Discussion of recent problems from the chemical literature including fast reaction and enzyme kinetics.

Prerequisite: 1905-341 Physical Chemistry II.

R-1905-559 Graduate Literature Search in Chemistry**2 sh**

An individual non-experimental investigation utilizing the scientific literature.

Prerequisites: Matriculation for an M.A. in Chemistry, approval of the dept. chairman and the graduate advisor.

R-1905-570 Advanced Biochemistry**3 sh**

A detailed treatment of selected topics in biochemistry. Discussions of carbohydrate, lipid and amino acid metabolism, protein synthesis and nucleic acid chemistry.

Prerequisite: 1905-470 Biochemistry or equivalent.

R-1905-590 Selected Topics in Advanced Chemistry**3 sh each time elected**

An in-depth study of selected areas in either analytical, inorganic, organic or physical chemistry with special emphasis upon recent developments in the field.

Prerequisite: Permission of instructor.

R-1905-595 Graduate Research**2 sh**

Directed individual laboratory investigation under guidance of faculty advisor. May be elected once or twice, maximum credit allowed—4 sh.

Prerequisites: 12 hours of graduate level chemistry courses and approval of the department chairman, graduate advisor, and faculty thesis advisor.

R-1905-600 Thesis

2 sh

Preparation and defense of thesis before the Chemistry Faculty.

Prerequisite: Approval of the department chairman, the graduate advisor and faculty thesis advisor.

The following Senior-Graduate courses may be elected with the permission of graduate advisor. Course descriptions will be found in the current undergraduate bulletin.

semester hours

1905-410	Advanced Quantitative Analysis.....	4
1905-411	Water Analysis and Purification	3
1905-421	Principles of Descriptive Inorganic Chemistry	3

GEOSCIENCE

Graduate Advisor: Dr. Charles L. Hamilton

Department Chairman: Professor Richard Hodson

The graduate programs in geoscience are designed to enable the student to pursue further study in the various areas of the department for professional or personal reasons, to further his preparation for the teaching profession, or for a career requiring advanced training for teachers in the field.

For the arts and science student, a graduate program is designed to give opportunity for in-depth study in the broad field of geoscience (geology). The program provides sufficient flexibility through electives so that emphasis in (1) metamorphic and igneous geology, (2) sedimentology and paleontology, or (3) oceanography and marine geology is possible. Some of the latter courses will be taken at the various sites of the New Jersey Marine Sciences Consortium.

Admission Requirements

Prior to matriculation the student should have completed a subject matter background of at least twenty-four semester hours in the area of specialization, as well as a sufficient background in related sciences and basic mathematics. In cases of a weak undergraduate background, prerequisite courses, not for graduate credit, may be assigned.

Candidates must fulfill the other criteria for graduate matriculation as listed in this bulletin (Admission to Graduate Study). Each candidate's background and credentials must be approved by the graduate advisor for the department.

Requirements for the Master of Arts Degree in Geoscience

Thirty-two semester hours are required, of which up to 8 may be at the 400 level. Additional 400 level courses will not be given credit without written approval of the department graduate advisor. Additional hours may be required to compensate for any deficiencies in the applicant's undergraduate record.

Degree candidates employed in the field of education may use six semester hours of free electives for graduate courses in the area of professional education.

I.	Required Courses	9-12 semester hours
A.	1914-537 Biostratigraphy of New Jersey	4
	1914-533 Advanced Invertebrate Paleontology	4
	1914-512 Paleocology	3
B.	1914-503 Advanced Physical Geology	4
	1914-504 Advanced Historical Geology	3
	1914-571 Geophysics	3
	1914-543 Advanced Mineralogy	3
	1914-546 Petrography	4
	1914-545 Optical Mineralogy	4
II.	Geoscience Electives	11-13 semester hours

III. Research	
1914-695 Thesis	4
IV. Free Electives	6
V. Comprehensive Examination	

Minimum: 32 semester hours

GEOSCIENCE

Course Descriptions

(Courses listed are not necessarily offered every year)

- T-1914-503 Advanced Physical Geology** **4 sh**
 In-depth study of the major problems of physical geology: processes of erosion, rock formation, continent and ocean-basin origin and relationships, earthquakes, interior of the earth, vulcanism, island arcs, mountain building, paleomagnetism, continental drift, and sea-floor spreading. Field trips. (2 hours lecture; 4 hours laboratory).
 Prerequisites: Physical Geology and 8 additional hours of geoscience at 400 level.
- T-1914-504 Advanced Historical Geology** **3 sh**
 In-depth analysis of major problems in geologic history, stratigraphy and paleoenvironments as interpreted through lithologic and paleontologic evidence. Required field trips. (2 hours lecture, 2 hours laboratory).
 Prerequisite: Stratigraphy.
- T-1914-530 Paleoeecology** **3 sh**
 Principles: distribution and association of fossils as interpreted from the evidence presented in the geologic record. Detailed paleoecological field study made of selected faunal assemblages. (2 hours lecture, 2 hours laboratory).
 Prerequisite: Invertebrate Paleobiology.
- T-1914-533 Advanced Invertebrate Paleobiology** **4 sh**
 Fossil invertebrates with emphasis on their evolutionary, paleoecologic and stratigraphic significance. Laboratory and field work stresses collecting, preparation, identification and curatorial and faunal analysis techniques. Required field trips. (3 hours lecture, 2 hours laboratory).
 Prerequisite: Invertebrate Paleobiology or undergraduate biology major sequence or the permission of the instructor.
- T-1914-535 Vertebrate Paleobiology** **3 sh**
 The geologic history, morphology, taxonomy, paleogeography and evolution of fossil vertebrates. Required field trips. (2 hours lecture, 2 hours laboratory).
 Prerequisites: Historical Geology, Vertebrate Zoology and one other course in vertebrate anatomy or permission of the instructor.
- T-1914-536 Paleobotany** **3 sh**
 The taxonomy, morphology, evolution, paleoecology and stratigraphic significance of fossil plants. Required field trips. (2 hours lecture, 2 hours laboratory).
 Prerequisites: Historical Geology and General Botany or permission of the instructor.

T-1914-537 Biostratigraphy of New Jersey**3 sh**

The geologic history, paleontology, stratigraphy and paleogeography of New Jersey. Required field trips. (2 hours lecture, 2 hours laboratory).

Prerequisites: Paleoecology or permission of the instructor.

T-1914-538 Sedimentary Petrography**4 sh**

The interpretative study of the structures, textures, composition and genesis of sedimentary rocks. Laboratory analyses of sediments and sedimentary rocks by optical, mechanical and chemical methods and the graphical representation of the resultant data. (3 hours lecture, 2 hours laboratory).

Prerequisites: Stratigraphy and Optical Mineralogy.

T-1914-543 Advanced Mineralogy**3 sh**

Chemical and physical principles as applied to minerals. Detailed study of representative minerals from the various families. Advanced techniques will be performed by the student. Field trips. (3 hours lecture).

Prerequisite: Mineralogy or permission of instructor.

T-1914-545 Optical Mineralogy**4 sh**

Theory and practice of using the polarizing microscope to study and identify minerals; theory of light transmissions in minerals; the practical effect. Required field trips. (3 hours lecture, 2 hours laboratory).

Prerequisite: Mineralogy.

T-1914-546 Petrography**4 sh**

Rock textures, structures and mineralogy using the polarizing microscope. Identification and classification of rocks and the origin and history of the rock as determined by microscopic study of thin sections. Required field trips. (3 hours lecture, 2 hours laboratory).

Prerequisites: Petrology and Optical Mineralogy.

T-1914-558 Coastal Geomorphology**4 sh**

Coastlines and their evolution. Processes and materials of the coastal zone. Shore zone hydrodynamics and sedimentation. Beach and barrier systems with special emphasis on the New Jersey shoreline. Also offered at the field stations of New Jersey Marine Sciences Consortium. (3 hours lecture, 2 hours laboratory).

Prerequisites: 12 hours of geoscience including geomorphology or permission of the instructor.

T-1914-560 Advanced Marine Geology**3 sh**

Development and evolution of the ocean basins; marine sedimentation; shoreline development and classification; submarine topography; mineral resources of the sea. Laboratory analysis of marine sediments and fossil assemblages. Required field trips. (2 hours lecture, 2 hours laboratory).

Prerequisite: Physical Geology and one 400 course in Marine Geology or Oceanography.

T-1914-571 Geophysics**3 sh**

Theory and application of conventional geophysical methods; seismology, magnetism, electricity and gravity. Laboratory includes the collection and interpretation of geophysical data. Field trips. (3 hours lecture).

Prerequisites: Physical Geology, 2 semesters each of College Physics and Calculus.

T-1914-572 Tectonics**3 sh**

The major structures of the Earth, the principal of isostasy, mountain-building, continental drift, sea-floor spreading, and possible causes of tectonism in the Earth. The methods of study, results obtained, interpretation of the data and the latest theories of tectonism. (3 hours lecture).

Prerequisites: Physical Geology or Principles of Geology, and College Physics.

T-1914-573 Nuclear Geophysics**3 sh**

Principles and application of nuclear physics to study of Earth, including: natural radiation; origin and occurrence of isotopes; use of isotopes in prospecting, geochronology and space geology; paleotemperature determinations; activation analysis; mining and use of radioactive elements; nuclear energy. (2 hours lecture, 2 hours laboratory).

Prerequisites: Advanced Physical Geology or Advanced Historical Geology, 1 year College Physics.

T-1914-575 Geochemistry**3 sh**

Chemical laws and principles applied to the Earth; chemical composition of the Earth, distribution and relative abundance of the elements. Use of isotopes in geology and the application of chemical principles to geologic processes. Study of meteorites included. Required field trips. (3 hours lecture).

Prerequisites: General Chemistry, Petrology.

T-1914-578 Igneous and Metamorphic Geology**4 sh**

The interpretative study of igneous and metamorphic rocks in detail with the aim of properly identifying and naming the rocks and interpreting their history; rock suites from classical areas. Required field trips. (3 hours lecture, 2 hours laboratory).

Prerequisites: Optical Mineralogy, Petrology.

T-1914-580 Field Geology**4 sh**

The principles and techniques of geologic field work. Independent and team mapping of local areas of geologic interest using modern field methods and instruments. (3 hours lecture, 2 hours laboratory).

Prerequisite: 12 hours of 400 level geology.

T-1914-0592 Special Problems in Geoscience**1-4 sh**

Independent research project to be performed by the student under faculty guidance.

Prerequisite: Matriculation for the M.A. degree in Geoscience or permission of the geoscience faculty.

T-1914-695 Thesis**4 sh**

In-depth field, laboratory and library investigation of a problem in the area of the student's interest in geoscience; results will be presented in oral and written form culminating in a written thesis.

Prerequisite: Matriculation for the M.A. degree in Geoscience.

MATHEMATICS AND COMPUTER SCIENCE

Graduate Advisor: Dr. William Parzynski

Department Chairman: Professor Robert Garfunkel

To meet the needs of graduate students interested in extensive study of mathematical theory or application, the department offers Master of Arts degrees in Pure and Applied Mathematics, Computer Science, and Statistics. To meet the needs of the teacher of mathematics, the department offers a Master of Arts degree in Mathematics Education, which is a special combination of courses in mathematics and mathematics education.

A cooperative doctoral program between Montclair State College and Teachers' College/Columbia University is available to qualified students in the Mathematics Program. Further information on this program is available from the Department Chairman.

Admission Requirements

A candidate for the Master of Arts degree in mathematics must consult the graduate advisor of the mathematics department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of 32 semester hours of work, is prepared in consultation with the graduate advisor. At least 24 semester hours of the Master of Arts program should be at the 500 level. Changes in the work program are made only with the written approval of that advisor.

The candidate for the Master of Arts degree must present an undergraduate major of at least 30 semester hours in mathematics. Courses in engineering and science that have a substantial mathematical content may be submitted toward this requirement. Candidates whose undergraduate preparation is deficient in either depth or breadth may be required to complete certain prerequisites which will not carry graduate credit.

Requirements for the Master of Arts Degree in Mathematics (Pure and Applied)

- I. Required: Two one-year courses selected as follows: 12 semester hours
 Analysis: 1701-521, 522, or 1701-525, 526
 Algebra: 1701-531, 532 or 1701-535, 536
- II. Mathematics Electives 14 semester hours
 Courses selected from: 1701-520 to 569 or
 1701-580 to 589 or
 1701-420 to 465
 with at least 12 semester hours at the 500 level. Students must elect 425 and 426 if not previously taken.
- III. Free Electives 6 semester hours
- IV. Comprehensive Examination in Pure and Applied Mathematics

Requirements for the Master of Arts Degree in Mathematics (Statistics Concentration)

- I. Statistics Requirement 12 semester hours
 Courses selected from: 1701-540 to 549

- II. Mathematics Electives 14 semester hours
 Courses selected from: 1701-520 to 569 or
 1701-580 to 589 or
 1701-420 to 465
 with at least 12 semester hours at the 500 level. Students must elect 1701-425, 426
 and 1701-440 or 443, and a computer science course, if not previously taken.
- III. Free Electives 6 semester hours
- IV. Comprehensive Examination in Statistics and Mathematics

**Requirements for the Master of Arts Degree in Mathematics
 (Computer Science Concentration)**

- I. Required Courses 12 semester hours
 Courses selected from 1701-560 or 1701-580 to 589
- II. Mathematics Electives 14 semester hours
 Courses selected from 1701-520 to 569, 1701-580 to 589 or 1701-420 to 465, with at
 least 12 semester hours at the 500 level. The student must elect 1701-425, 426,
 1701-431 or 1701-436, and 1701-440 or 1701-443 if not previously taken.
- III. Free Electives 6 semester hours
- IV. Comprehensive Examination in Computer Science and Mathematics

**Requirements for the Master of Arts Degree in Mathematics
 (Mathematics Education Concentration)**

- I. Pure and Applied Mathematics 14 semester hours
 (At least 9 semester hours from courses numbered 520 to 569, 580 to 589). Courses
 must be selected from at least 3 of the 5 areas:
 Algebra: 1701-431, 531, 532, 535, 536
 Analysis: 1701-420, 425, 426, 521, 522, 525, 526
 Probability and Statistics: 1701-440, 443, 540 to 549
 Geometry: 1701-450, 551, 554, 555
 Computers: 1701-560, 580 to 589
 Students must elect 425 and 431 if not previously taken.
- II. Mathematics Education 9 semester hours
 Three courses selected from 1701-570 to 579
- III. Free Electives 9 semester hours
- IV. Comprehensive Examination in Mathematics and Mathematics Education.

Note: For Teacher Certification additional courses may be required. (See page 36)

MATHEMATICS

Course Descriptions

S-1701-510, 511 Workshop in Mathematics Education I, II **3 sh each**

Specific contemporary topics and current issues in the junior and senior high school. Available experimental and commercial textbooks. Mathematical content. Sources of aids and equipment. Evaluation. Training of key in-school personnel. Problems of implementation.

S-1701-520 Set Theory **3 sh**

Historical development, paradoxes, ordered sets, Schroder-Bernstein theorem, axiom of choice, transfinite induction, cardinal and ordinal numbers.

Prerequisite: 1701-222 Calculus III or equivalent.

S-1701-521, 522 Real Variables I, II **3 sh each**

Real number system; Lebesgue measure and integration; differentiation; Fourier series; LP, Metric, Normed vector, Banach and Hilbert spaces.

Prerequisite: 1701-425 Advanced Calculus I or equivalent.

S-1701-525, 526 Complex Variables I, II **3 sh each**

Integration and differentiation in the complex domain, Cauchy's theorem, Cauchy integral formula, Laurent expansion, residues, elements of conformal mapping. Series and product representations.

Prerequisite: 1701-425 Advanced Calculus I or equivalent.

S-1701-531, 532 Abstract Algebra I, II **3 sh each**

Basic algebraic structures including groups, rings, fields, modules and lattices.

Prerequisite: 1701-431 Foundations of Modern Algebra.

S-1701-535, 536 Linear Algebra I, II **3 sh each**

Vector spaces and linear transformations, including inner product, matrix representations, binary and quadratic forms, eigenvalues and eigenvectors, canonical forms and functions of matrices.

Prerequisite: 1701-335 Elements of Linear Algebra

S-1701-537 Mathematical Logic **3 sh**

Topics include propositional and predicate calculus, model theory, Godel's completeness theorems and decidability.

Prerequisite: 1701-436 Elements of Logic.

S-1701-540 Probability **3 sh**

Sample spaces and events, combinatorial analysis, conditional probability and stochastic independence, random variables and probability distributions, expected value and variance, probability generating functions, continuous random variables.

Prerequisite: 1701-340 Probability.

S-1701-541 Applied Statistics **3 sh**

Review of estimation and hypothesis testing for one sample and two sample problems; introduction to non-parametric statistics, sampling techniques, and linear regression; fundamental principles of design, analysis of variance and analysis of covariance.

Prerequisite: 1701-440 Statistical Methods for Research or
1701-443 Statistics: Theory and Application.

S-1701-542 Introduction to Stochastic Processes

3 sh

Generating functions, convolutions, recurrent events, random walk models, gambler's ruins problems, Markov chains and processes, time dependent stochastic processes, queuing theory and epidemic models.

Prerequisite: 1701-540.

S-1701-543 Statistical Theory

3 sh

Review of the normal, gamma and chi-square distributions; sampling theory and the 't' and 'F' distributions; point estimation of one parameter, minimum variance unbiased estimation, method of moments estimators, maximum likelihood estimation and interval estimation, testing hypotheses, Neyman-Pearson Lemma, Likelihood Ratio Tests, Power, Bivariate Normal Distribution.

Prerequisite: 1701-440 Statistical Methods for Research or
1701-443 Statistics: Theory and Application.

S-1701-545 Multivariate Analysis

3 sh

Statistical procedures for the multivariate normal distribution. Parameter estimation and derived distributions, Hotelling's T statistic, multivariate linear hypothesis, principal component analysis.

Prerequisites: 1701-541 and 548, Recommended: 1701-535

S-1701-546 Non-Parametric Statistics

3 sh

Selected distribution-free tests and estimation techniques including sign, Kolmogorov-Smirnov, Wilcoxon signed rank, Mann-Whitney, Chi-square rank correlation, Kendall's tau, Kruskal-Wallis, Friedman, McNemar, and others.

Prerequisite: 1701-541.

S-1701-547 Design and Analysis of Experiments

3 sh

Fundamental principles of design; completely randomized experiments; randomized block; Latin Squares; Graeco-Latin squares; split-plot design; factorial experiments; confounding; fractional replication; experimental and sampling errors.

Prerequisites: 1701-541 and 548.

S-1701-548 Applied Regression Analysis

3 sh

Matrices, linear regression; correlation; analysis of residuals; multiple regression; polynomial regression; partial correlation; stepwise regression; regression and model building; regression applied to analysis of variance problems; introduction to nonlinear regression.

Prerequisites: 1701-440 and 443 or equivalent.

S-1701-549 Sampling Techniques

3 sh

Sampling and survey methodology; basic sampling theory; simple, stratified, random, cluster, systematic and area sampling. Sampling errors and estimation procedures.

Prerequisite: 1701-440 and 443 or equivalent.

S-1701-551 Topology

3 sh

Basic point-set topology, topological spaces, homeomorphisms, compactness, connec-

tedness, separation properties, uniformities, metricability, introductory algebraic topology, homology groups and homotopy groups.

Prerequisite: 1701-425 Advanced Calculus I or equivalent.

S-1701-554 Projective Geometry

3 sh

Projective planes and spaces are studied by synthetic and analytic approaches. Topics covered include the theorems of Desargues and Pappus, harmonic sequences, projectivities, coordinatization, finite planes, and conics.

Prerequisite: 1701-450 Foundations of Geometry or equivalent.

S-1701-555 Differential Geometry

3 sh

Application of vectors to the study of classical three-dimensional geometry. Topics include: plane and space curves, first and second fundamental forms, lines of curvature, asymptotic lines, geodesics.

Prerequisite: 1701-222 Calculus III or equivalent.

S-1701-560 Numerical Analysis

3 sh

Polynomial approximation, interpolation, numerical solution of equations, linear algebraic equations, matrix inversion and eigenvalue analysis, numerical solution of differential equations.

Prerequisites: 1701-335 Elements of Linear Algebra, 1701-425 Advanced Calculus I, 1701-404 Techniques and Applications of Computer Science.

S-1701-564 Ordinary Differential Equations

3 sh

Existence and uniqueness of solutions, periodic solutions, linear and non-linear systems, singularities, stability theory.

Prerequisites: 1701-335, 1701-420 Differential Equations, 1701-425 or equivalents.

S-1701-566 Partial Differential Equations

3 sh

First order equations, separation of variables. Fourier's series, hyperbolic, parabolic and elliptic equations, transform methods.

Prerequisites: 1701-335, 1701-420, 1701-425 or equivalent.

S-1701-568, 569 Applied Mathematics I, II

3 sh

Discrete mathematics with applications to the social and behavioral sciences, initial and boundary value problems with applications to the physical sciences, Green's functions, integral equations, calculus of variations.

Prerequisites: 1701-335, 1701-420, 1701-425 or equivalent.

S-1701-570 Administration and Supervision of Mathematics

3 sh

Problems of organization, administration and supervision in the mathematics program of the school. Functions, duties and qualifications of the supervisor investigated. Current problems and research findings.

S-1701-571 Curriculum Construction in Mathematics

3 sh

Contemporary proposals for the mathematics of grades K through 12. Consideration is given to the problem of implementation of current recommendations. Examination is made of mathematical concepts underlying various programs.

S-1701-572 Teaching of General Mathematics

3 sh

Mathematics programs for the non-college bound high school student. Investigation of contemporary literature. Basic characteristics and needs of non-academic students,

preparation and use of resource materials, classroom teaching techniques and methods of motivation. Emphasis on development of suitable curricula for non-academic students.

S-1701-573 Mathematics Materials for the Teacher of Mathematics **3 sh**

Construction, adaptation and effective use of materials to improve the teaching of high school mathematics. Particular attention given to the overhead projector, aids, and models and to material for the mathematics laboratory and club activities.

S-1701-574 Problem Analysis in Secondary Mathematics **3 sh**

Psychology and techniques of problem-solving. Discovery and heuristic methods. Intuitive and inductive reasoning in the solution of non-routine problems from high school mathematics. Problem formation and solution.

Prerequisite: 1701-222 Calculus III or equivalent.

S-1701-575 Selected Topics in Mathematics **3 sh**

Selection of topics associated with secondary and early college years of mathematics investigated from an advanced point of view. Topics selected to give the teacher a professionalized subject matter viewpoint of algebra, geometry, number theory, real and complex analysis, probability and statistics.

Prerequisite: 1701-222 or equivalent.

S-1701-576 Research Seminar in Mathematics Education **3 sh**

Designed for matriculated graduate students in the mathematics education program. Purpose: to have the students survey and analyze recent research projects.

Prerequisite: Admission to Master's program.

S-1701-577 Mathematics Education in the Elementary School **3 sh**

The contemporary mathematics curriculum of the elementary and middle school. Content: the role of behavioral objectives and learning theory in curriculum development, teacher training, related research findings.

S-1701-580 Advanced Programming **3 sh**

Assembler language programming including digital representation of data, subroutine linkage, macro definition and generation, and input/output routines. Additional programming techniques including documentation, structured programming, address modification and indexing, string manipulation, and some of the more sophisticated features of the operating system and job control language.

Prerequisites: 1701-404 Techniques and Applications of Computer Science.

S-1701-581 Systems Programming **3 sh**

Assembly languages, macros, subroutines, data structures, vectors and arrays, tables, hash coding, stacks, lists, data base system.

Prerequisite: 1701-580.

S-1701-582 Theory of Automata and Formal Languages **3 sh**

Languages and grammars, finite automata and regular grammars, context free grammars, push-down automata, Turing machines, computability, deterministic languages, linear bounded automata and stack automata.

Prerequisites: 1701-404 and either 1701-431 Foundations of Modern Algebra or 1701-436 Elements of Logic.

S-1701-583 Computer Algorithms**3 sh**

Data structures, string processing, searching and sorting, list processing, information theory, advanced programming techniques, and applications.

Prerequisites: 1701-404 Techniques and Applications of Computer Science.

S-1701-584 Operating System Design**3 sh**

Design and implementation of operating systems, multiprogramming, multiprocessor, device management, scheduling, segmentation, paging, virtual memory, case studies.

Prerequisites: 1701-581, 582.

S-1701-585 Topics in Computer Science**3 sh**

Recent developments in the field. Topics such as Monte Carlo methods, simulation and special areas of application may be selected.

Prerequisite: 1701-581.

S-1701-586 Information Retrieval and System Design**3 sh**

Random and sequential files, file organization and processing, access methods, data bases, system dynamics, concepts and design of information systems. Case studies and applications. Programming language COBOL or PL/1.

Prerequisite: 1701-404.

S-1701-595 Seminar in Mathematics**1-3 sh**

Guided study of selected topics in major field of interest.

Prerequisite: Permission of a graduate advisor.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
S-1701-403 Techniques and Applications of Statistics	3
S-1701-404 Techniques and Applications of Computer Science	3
S-1701-420 Differential Equations	3
S-1701-423 Introduction to Complex Variables	3
S-1701-425 Advanced Calculus I	3
S-1701-426 Advanced Calculus II.	3
S-1701-428 Introduction to Topology.	3
S-1701-431 Foundations of Modern Algebra	3
S-1701-433 Theory of Numbers	3
S-1701-436 Elements of Logic	3
S-1701-440 Statistical Methods for Research	3
S-1701-443 Statistics: Theory and Application	3
S-1701-450 Foundations of Geometry	3
S-1701-460 Introduction to Applied Mathematics	3
S-1701-463 Introduction to Numerical Analysis	3
S-1701-465 Linear Programming and Game Theory.	3
S-1701-475 History of Mathematics	3

SCHOOL OF PROFESSIONAL ARTS AND SCIENCES

Houston G. Elam, Ph.D., Dean
Michael A. Puglisi, M.B.A. Associate Dean

Courses offered by the School provide a wide range of knowledge opportunities which, if elected carefully, result not only in a broadening of professional competence, but also in an improved life style.

Graduate programs in the School of Professional Arts and Sciences are offered to accomplish several objectives:

1. To increase one's knowledge within a specialized professional area improving job mobility and promotional opportunities.
2. To provide an opportunity for candidates to earn an advanced degree and obtain improved professional credentials.
3. To provide the opportunity for promoting professional skills outside one's area of major competence.

Graduate programs within the School are structured to result in the awarding of a Master of Arts degree in (1) Business and Distributive Education, (2) Health Professions, (3) Home Economics, (4) Industrial Education and Technology and (5) Physical Education.

BUSINESS EDUCATION AND OFFICE SYSTEMS ADMINISTRATION

Graduate Advisors: Dr. Louis C. Nanassy
Dr. Joseph C. Hecht
Department Chairman: Dr. Albert D. Rossetti

The department of business education and office systems administration prepares teachers of business education for administrative, supervisory and specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives candidates have an opportunity to supplement their undergraduate program and to explore advanced areas of work in accordance with their individual background, experience, achievement and professional needs.

Admission Requirements

Graduate work toward the Master of Arts Degree in Business or Distributive Education presupposes the completion of an undergraduate major in business or distributive education or equivalent.

Requirements for the Master of Arts Degree in Business and Distributive Education

- | | | |
|-----|---|-------------------|
| I. | Basic Professional Education | 6 semester hours |
| II. | Specialization | 20 semester hours |
| | A. Required Courses | |
| | 0838-501 Principles and Problems of Business Education | 3 |
| | 0838-503 Introduction to Research in Business Education | 3 |
| | 0838-603 Seminar in Business Education | 3 |

At least one of the following for students of Business Education:

0838-511	Improvement of Instruction in Bookkeeping, Accounting and Business Arithmetic	3
0838-512	Improvement of Instruction in General Business Subjects	3
0838-513	Improvement of Instruction in Stenography and Secretarial Practice . .	3
0838-514	Improvement of Instruction in Typewriting and Clerical Practice	3
At least one of the following for students of Distributive Education:		
0840-550	Improvement of Instruction in Retailing Subjects	3
0840-552	Improvement of Instruction in Wholesaling and Services	3
B.	Electives in Business and Distributive Education	8 semester hours

III. Free Electives 6 semester hours

IV. Comprehensive Examination. Oral and written, given in the Fall and Spring in conjunction with 0838-603 Seminar in Business Education. Examinations are general in nature and are intended to test maturity of thought with respect to business and distributive education.

Minimum: 32 semester hours

BUSINESS EDUCATION

Course Descriptions

V-0838-501 Principles and Problems of Business Education 3 sh

Survey of principles and practices, history of business education, objectives, relationship of business education to general education, trends and problems in the field.

V-0838-503 Introduction to Research in Business Education 3 sh

Evaluation of current literature in business and distributive education, nature and types of research, methods and techniques of research and tools for interpreting statistical data. Student develops outline and initial chapters of research study to be completed in 0838-603, seminar in Business Education.

Prerequisites: 0838-501 and an Improvement of Instruction course.

V-0838-504 Evaluation and Measurement in Business Education 3 sh

Constructing, administering, interpreting and evaluating all types of testing and evaluation materials in business subjects.

V-0838-505 Administration and Supervision of Business Education 3 sh

Study of problems of organizing, directing and supervising business education programs at the secondary school and collegiate levels.

V-0838-506 Business Education Curriculum 3 sh

Study of business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.

V-0838-511 Improvement of Instruction in Bookkeeping, Accounting and Business Arithmetic 3 sh

Study of objectives, content, methods, teaching aids and evaluation procedures.

Prerequisites: Undergraduate courses in accounting and methods or teaching experience.

V-0838-512 Improvement of Instruction in General Business Subjects 3 sh

Study of objectives, content, methods, teaching aids and evaluation procedures for courses such as general business, economic geography, business law and consumer education.

Prerequisites: Undergraduate courses in general business and methods or teaching experience.

V-0838-513 Improvement of Instruction in Stenography and Secretarial Practice 3 sh

Study of objectives, content, methods, teaching aids, and evaluation procedures for subjects in stenography and secretarial practice. Proficiency examinations in stenography will be given.

Prerequisites: Undergraduate methods in stenography, and/or teaching experience.

V-0838-514 Improvement of Instruction in Typewriting and Clerical Practice 3 sh

Study of objectives, content, methods, teaching aids, and evaluation procedures of subjects in typewriting and clerical practice. Proficiency examinations in typewriting will be given.

Prerequisites: Undergraduate methods in typing and/or teaching experience.

V-0838-527 Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines 3 sh

Workshops, which may run simultaneously, in study, planning and development of teaching materials and projects fitted to a particular situation. Individual and small-group instruction with occasional seminar meetings of the entire group.

Prerequisite: Teaching experience in the field.

V-0838-528 Field Studies in Business Education 3 sh

Opportunity for the classroom teacher to evaluate some of the practices of business offices, industries and retailing organizations in the metropolitan area. Experience in planning, conducting and follow-up of field trips.

V-0838-529 Principles of Cooperative Office Education 3 sh

Survey of principles and practices of cooperative office education. Objectives, organization, related class, placement, and supervision are investigated.

Prerequisite: Business Education Teaching Certificate.

V-0838-530 Business Education in Post-High School Institutions 3 sh

Purposes, curricula, method and problems of teaching business education subjects in post-high school institutions, including technical institutions, two-year and four-year colleges, and universities.

V-0838-570 Business Education for Teachers of the Disadvantaged 3 sh

Prepares teachers of business subjects to meet specific needs of disadvantaged students. Occupational opportunities open to the disadvantaged and the secondary school business program which will prepare them for these occupations. Teachers will build curricula and develop special instructional materials and methods needed for disadvantaged students in the inner-city schools.

V-0838-603 Seminar in Business Education 3 sh

Matriculated graduate student in business or distributive education completes research

project in business or distributive education. Course also prepares student for Master of Arts comprehensive examination.

Prerequisite: 0838-503.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Descriptions may be found in the current undergraduate bulletin.

	semester hours
0845-408 Principles of Office Management	3
0838-434 Introduction to Data Processing.	3
0838-435 Computer Applications of Office Systems.	3
0838-480 Touch Shorthand in Recording Communication	2

DISTRIBUTIVE EDUCATION

Course Descriptions

0840-550 Improvement of Instruction in Retailing Subjects 3 sh

Objectives, content, methods, teaching aids and evaluation procedures for courses such as salesmanship, retail store operation, advertising, merchandising and marketing.

Prerequisite: Undergraduate methods in distributive education, or teaching experience in distributive education.

0840-552 Improvement of Instruction in Wholesaling and Services 3 sh

Objectives, content, methods, teaching aids and evaluation procedures for courses such as wholesaling, limited and service types; service, gas stations, cleaning establishments, rent-all and other service organizations.

Prerequisite: Undergraduate methods course in distributive education, or teaching experience in distributive education.

0840-553 Principles and Problems of Adult Extension Distributive Education 3 sh

Organization, promotion, publicity and methods for adult extension classes—using community resources. Includes in-service, preservice and advanced courses for adults in urban and suburban situations.

V-0840-554 Workshop in Problems of Distributive Education 3 sh

Intensive analysis of problem-solving in distributive education programs. Discussion experience in teaching and administering education programs. Committee work-seminar method is used.

V-0840-555 Field Studies in Distributive Education 3 sh

Opportunity for the classroom teacher to visit retail organizations, wholesaling houses, distribution centers and service establishments in the metropolitan area and evaluate their practices. Experience in planning, conducting and follow-up of field trip.

V-0840-556 The Project Method in Distributive Education 3 sh

Development, use and coordination of individual, small-group and class vocational projects providing simulated occupation experience for the high school "non-co-operative" distributive education student.

V-0840-557 Audiovisual Aids in Distributive Education 3 sh

Provides the classroom teacher an opportunity to view and use various audiovisual multi-media material and to evaluate, plan and produce his/her own multi-media projects.

V-0840-558 Distributive Education in the Two-Year College **3 sh**

Objectives, curriculum and administration of the distributive education programs in two-year community colleges.

V-0849-559 Distributive Education for the Disadvantaged Student **3 sh**

Prepares teachers of distributive education to meet specific needs of disadvantaged students. Special curriculum development as it relates to the co-operative work experience program. Coordination problems in the inner-city area.

The following Senior-Graduate courses may be elected with the permission of the graduate advisor. Descriptions of courses may be found in the undergraduate bulletin.

semester hours

V-0840-454	Principles and Methods of Teaching Distributive Education and Coordination.	3
V-0840-455	Curriculum Development in Distributive Education	2
V-0840-456	Organization and Administration of Distributive Education.....	2
V-0840-457	Organization and Administration of Co-curricular Activities in Distributive Education	2

HEALTH PROFESSIONS

Graduate Advisor and Department Chairman: Dr. Harry H. Hoitsma

The graduate program, leading to a Master of Arts degree, provides advanced study for candidates engaged in or seeking added preparation for positions in health education programs. Essential aspects of the program include required as well as selected elective courses in the Department of Health Professions, interdisciplinary coursework, a research experience culminating in an oral examination and the completion of a major project. All candidates are required to complete a comprehensive written examination prior to enrollment in the research project course: 0837-0603.

The variety of educational experiences provided in the program is offered in an effort to prepare health educators for their continually emerging role in the development of effective methods of educating people concerning proper personal health care and the effective use of available health services. The development of a historical perspective is provided along with an emphasis on specific contemporary health problems. The analysis of recent developments in health education combines with the interpretation of important scientific advancements to form the foundational basis of this program.

Admission Requirements

A major in health education from an accredited college or university constitutes the basic requirement for admission. Candidates with degrees in closely related areas may be considered, although prematriculation course work may be required. Applicants with a minor or less preparation in health education must complete designated course work prior to matriculation. Students with a major in health education may also be required to undertake additional work where academic deficiencies are apparent.

Requirements for the Master of Arts Degree in Health Professions

- I. Required Courses..... 15 semester hours
 - *0837-526 Curriculum Development in Health Education..... 3
 - *0837-528 Evaluation in Health..... 3
 - *0837-535 History and Foundations of Health I or
 - *0837-536 History and Foundations of Health II 3
 - *0837-503 Research Methods in Health 3
 - 0837-603 Research Project in Health..... 3
 - *Must be completed prior to registration for written comprehensive examination.
- II. Selected Health Education Electives..... 9 semester hours
The selection of health education electives will be determined through advisement and will be based on the professional objectives of the candidate.
0837-530 Seminar on Basic Issues in Health..... 3
(This course is recommended but not required prior to the comprehensive written examination.)
- III. Free Electives 8 semester hours
- IV. Comprehensive Examination

Minimum: 32 semester hours

Note:

1. No more than two 400-level courses may be taken for credit in the field of specialization.
2. Contact the departmental advisor for regulations pertaining to the written comprehensive examination.

HEALTH PROFESSIONS

Course Descriptions

W-0836-501 Selected Developments in Safety 3 sh

Selected aspects of safety, including major areas: home, industrial, public and transportation. Community's role in promoting a safe environment.

Prerequisite: A basic course in safety or the equivalent.

W-0837-500 Health Aspects of Family Living 2 sh

The family in contemporary society and alternatives to the traditional family, including the health aspects of reproduction, heredity, growth and development.

Prerequisite: A basic course in health education.

W-0837-502 Determinants of Environmental Health 3 sh

Advanced study of health and safety aspects of the environment: air, water, industrial pollution and the impact of expanding population on health problems.

Prerequisite: A basic course in environmental health or permission of advisor.

W-0837-503 Research Methods in Health 3 sh

Theoretical and practical experiences in methods of inquiry, designing of research studies, utilization of various tools for gathering data, statistical analysis of data, and writing of research proposals.

Prerequisite: W-0837-528 Evaluation in Health.

W-0837-505 School Health Program Management 3 sh

Examines the various aspects of management theory pertinent to school health programs. Guiding principles and philosophical considerations of theory and practice are also reviewed. Includes management techniques, staffing patterns and accounting procedures essential for the successful school health program. Evaluative devices are analyzed and reviewed to determine the effectiveness of the total program.

Prerequisite: Master's degree candidates in Health Education only.

W-0837-510 Health Education Workshop 3 sh

For teachers of health education; deeper understandings of subject matter, current methods and techniques for the classroom, and considerations for curriculum development.

Prerequisite: Undergraduate preparation in health education or in a related field of study.

W-0837-512 Alcohol Education Workshop 3 sh

Current teaching materials, techniques and approaches in the alcohol education programs in schools and communities: physiological, psychological, sociological, legal, economic, religious, safety, and rehabilitative aspects.

Prerequisite: 0837-301 Addictions and Dependencies or 0837-413 The Drug Abuse Problem, or permission of advisor.

W-0837-513 Drug Abuse Seminar

3 sh

Advanced study in selected aspects of drugs: recent pharmacological, legal, economic and rehabilitative developments. Emphasizes individual project approach.

Prerequisite: 0837-301 Addictions and Dependencies or 0837-313 The Drug Abuse Problem or permission of advisor.

W-0837-514 Venereal Disease Education

3 sh

Workshop emphasizing pathology, epidemiology, treatment and prevention of venereal disease. Includes consideration of school and community program development.

Prerequisite: A basic course in health or permission of advisor.

W-0837-516 Selected Developments in Community Health

3 sh

Advanced study of aspects of community health: recent developments in air and water pollution, waste disposal and sanitation, and communicable disease protection.

Prerequisite: A basic course in community health or permission of the advisor.

W-0837-526 Curriculum Development in Health Education

3 sh

Nature and construction of comprehensive health education curricula, elementary grades through senior high school. Recommended for health education majors only.

Prerequisite: Basic course in health education and basic course in methods of teaching health education.

W-0837-528 Evaluation in Health

3 sh

Measurement and evaluation processes relating to health in schools and communities: examination and development of research instruments to evaluate behavior, knowledge and attitudes; interpretative and administrative factors involved in the evaluation process.

Prerequisite: A basic course in statistics or in tests and measurement.

W-0837-530 Seminar in Basic Issues in Health

3 sh

Contemporary health topics and problems are identified, interpreted and critically analyzed for development of deeper insights and understanding of the basic issues; individual or group research project.

W-0837-531 Independent Study in Health

2-4 sh

Under the direction of departmental faculty member. Semester hours determined by department chairman following consultation with departmental research committee. For students in health professions only.

W-0837-532 Air Pollution

3 sh

A consideration of the diverse factors contributing to air pollution, the physiological responses of critical organs to air pollutants, public health and economic implication, air pollution control standards and legislation, and principles of monitoring devices.

Prerequisite: General Chemistry, Anatomy and Physiology.

W-0837-535 History and Foundations of Health I

3 sh

Comprehensive historical study of our continual struggle against the forces of disease and infirmity. Includes health and medical practices of primitive peoples, ancient civilizations, the Middle Ages, and the Renaissance.

Prerequisite: For health professions majors or with permission of the departmental advisor.

W-0837-536 History and Foundations of Health II**3 sh**

Comprehensive historical study of health and medical practices beginning with the seventeenth century and extending through the twentieth century. Major health science discoveries are identified and the development of school health education is considered.

Prerequisite: For health majors or with permission of the departmental advisor.

W-0837-603 Research Project in Health**3 sh**

Provides an intensive research experience for Master's degree candidates in health education. It reflects the culmination of coursework and involves the completion of a research document. All candidates must satisfactorily complete an oral examination based on the research experience.

Prerequisites: 0837-503 Research Methods, 0837-528 Evaluation in Health, and successful completion of the departmental written comprehensive examination.



HOME ECONOMICS

Graduate Advisor and Department Chairman: Dr. Katharine B. Hall

The graduate program in home economics leads to the degree of Master of Arts in Home Economics. Individual programs can be structured from the courses offered to provide advanced specialized training needed for college and university teaching, for leadership positions in the various professions in business, for social welfare agencies, for public schools and adult education programs, for research and for extension services.

Admission Requirements

Requirements for admission to graduate study are prescribed by the Graduate Division. A program is developed for each student depending on his or her individual professional goals. Students lacking adequate preparation may be required to take additional courses at the undergraduate level as prerequisites to graduate study.

Requirements for the Master of Arts Degree in Home Economics

I.	Required Courses.....	11 semester hours
	1301-507 Research in Home Economics.....	3
	1301-509 Research Seminar or 1301-600.....	3 or 4
	1301-540 Interdisciplinary Study of the Family.....	3
	1301-590 Contemporary Issues in Home Economics	3
II.	Professional Emphasis	9 semester hours
	Select from one of the following groups:	
	A. Home Economics Education	
	1301-501 Seminar in Home Economics Education	3
	1301-503 Program Development in Family Life Education.....	3
	1301-506 Supervision of Home Economics.....	3
	1301-403 Consumer Education Techniques	2
	1301-590 Contemporary Issues in Home Economics	3
	1301-404 Evaluation in Home Economics	3
	B. Home Management—Consumer Economics	
	1301-403 Consumer Education Techniques	3
	1301-530 Consumer Behavior.....	3
	1301-531 Family Financial Problems.....	3
	1301-532 Family and Consumer Economics.....	3
	1301-535 Consumer and Family Law.....	3
	1301-560 Housing the Family	3
	1301-570 The Management of Family Resources	3
	1301-571 Problems Solving in Family Counseling.....	3
	1301-572 Management Seminar	3
	C. Family Relations—Child Development	
	1301-503 Program Development in Family Life Education.....	3
	1301-514 The Child in the Family.....	3
	1301-542 Dynamics of Family Interaction	3
	1301-544 Intercultural Study of the Family	3
	1301-445 The Inner City Family	3

III. Home Economics Electives 3-9 semester hours

To be selected from approved graduate courses. Each 500 level course has as its prerequisite a course satisfactorily completed within the last 5 years in the same area of study on the graduate or undergraduate level.

IV. Free Electives 3-9 semester hours

V. Comprehensive Examination, both oral and written, to be taken after completing 24 semester hours of graduate work.

VI. Candidates who choose to write a thesis will register for 1301-600 for four semester hours credit in lieu of 1301-509 Research Seminar.

Minimum: 32 semester hours

HOME ECONOMICS

Course Descriptions

X-1301-501 Seminar in Home Economics Education **3 sh**

Identifying the issues in home economics education at all levels. Trends as a basis for managing, change in curriculum, and teaching. Each participant will design a project and plans for implementation.

X-1301-503 Program Development in Family Life Education **3 sh**

Analysis of the development of family living programs in public schools and other agencies. Current problems, practices, and trends. Designing and planning for the implementation of innovative programs.

X-1301-506 Supervision of Home Economics **3 sh**

Curricula, current trends, facilities, professional literature and evaluation techniques. Competencies for the role of supervisor analyzed. Provides elective credits toward Supervisor's Certificate.

Prerequisite: Classroom teaching experience.

X-1301-507 Research in Home Economics **3 sh**

Designed to provide basic research and statistical literacy so that students can develop a research proposal in its entirety in any one area of home economics.

Prerequisite: 1301-304 or equivalent

X-1301-508 Independent Study **1-3 sh**

An opportunity to study in depth, areas of home economics which are not offered in the regular curriculum. Approval of Department Chairman required.

X-1301-509 Research Seminar **3 sh**

Library or experimental research on specific problems of limited scope. Work may be taken in the following areas: child and family, family and consumer studies, family housing, foods, nutrition, textiles, clothing or home management.

Prerequisite: 1301-507.

X-1301-514 Child in the Family **3 sh**

An intensive study of the theories and research related to child rearing techniques; analysis of factors influencing parental practices and their effects on the child.

- X-1301-520 Clothing and Human Behavior** **3 sh**
 Analysis of factors affecting appearance and satisfaction in clothing. Economic, sociological and psychological aspects of clothing in relation to the individual.
- X-1301-530 Consumer Behavior** **3 sh**
 Investigating family consumer behavior as affected by individual perception, motivation and personality, family organization, social class, subcultures and economic conditions of the nation. Models of consumer behavior evaluated.
- X-1301-531 Family Financial Problems** **3 sh**
 Study of families with financial concerns and crises. Emphasis on effective use of money to meet families' life styles and alleviate problem areas.
- X-1301-532 Family and Consumer Economics** **3 sh**
 Study of families and consumers from economic perspectives in society. Emphasis on broad implications of economic practices and policies for various groups of families as they function in the marketplace.
- X-1301-535 Consumer and Family Law** **3 sh**
 Laws and policies of institutions which affect family functions, relationships and welfare.
- X-1301-540 Interdisciplinary Study of the Family** **3 sh**
 Contributions various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make towards a more comprehensive understanding of family life.
- X-1301-542 Dynamics of Family Interaction** **3 sh**
 Critical review of concepts and theories, both psychological and sociological, currently used in understanding patterns and problems of family relationships.
- X-1301-544 Intercultural Study of the Family** **3 sh**
 Analytical study of cross cultural regularities and differentials in family structures. Functions and impact of social change on family values and patterns. Varied conceptual approaches to the study of family as well as a broad acquaintance with empirical studies and research.
- X-1301-560 Housing the Family** **3 sh**
 Analysis of location, structure, design, furnishings and equipment as a setting for the physical and emotional development of the individual and the family.
- X-1301-570 The Management of Family Resources** **3 sh**
 Family as a decision-making unit. Directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on family's ability to maximize its resource potential and utilization.
- X-1301-571 Problem-Solving in Family Counseling** **3 sh**
 Counseling families in problem-solving on resource use, including the resources of time, energy, attitudes and material and non-material goods and services.
- X-1301-572 Management Seminar** **3 sh**
 Application of personal management concepts to one's professional role with the goal of developing more effective ways of handling professional situations and responsibilities.
- X-1301-580 New Findings in Nutrition** **3 sh**
 Recent developments in nutrition and a critical review of fundamentals.

X-1301-590 Contemporary Issues in Home Economics**3 sh**

A seminar dealing with issues in home economics with special emphasis on designing programs for social change.

Prerequisites: Matriculation and 20 sh in graduate program.

The following Senior-Graduate courses are available as electives with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

	semester hours
1301-403 Consumer Education Techniques	3
1301-404 Evaluation in Home Economics	3
1301-408 Workshop in Home Economics	3
1301-445 The Inner City Family	3

INDUSTRIAL EDUCATION AND TECHNOLOGY

Graduate Advisor: Dr. Arthur W. Earl

Department Chairman: Dr. George Olsen

Graduate study in industrial education and technology is designed to improve the professional training of industrial education teachers, to enhance their teaching proficiency through study of trends and developments in the fields, to improve the organization of the industrial arts laboratory and to provide a basis for work in administration and supervision. Emphasis is given to advanced work in industrial education and related fields which broaden professional experiences and accent industrial concepts.

Graduate programs of students matriculated in the department are tailored to the individual's needs through consultation with the graduate advisor. Students must meet the departmental requirements for either a thesis program (Option A) or a non-thesis program with a comprehensive examination (Option B).

Graduate students matriculated in the Master of Arts degree program who desire certification as a Supervisor of Industrial Education or as a Coordinator of Cooperative Industrial Education can arrange their programs with the graduate advisor.

Admission Requirements

Study toward the Master of Arts degree in industrial education and technology presupposes the completion of an undergraduate major in the same area. Individuals who have undergraduate majors in this area, but do not wish to work toward a degree, may enroll in graduate courses in the department.

Requirements for the Master of Arts Degree in Industrial Education and Technology (Option A)

I. Required Courses

- | | | |
|----|--|-------------------|
| A. | General. | 3 semester hours |
| | 0824-503 Methods and Instruments of Research. | 3 |
| B. | Industrial Education Specialization | 12 semester hours |
| 1. | Required | |
| | 0996-502 Curriculum Construction & Course. | 3 |
| | Organization in Industrial Education | |
| | 0996-509 Industrial Education Facilities Planning. | 3 |
| | 0996-607 Research Seminar in Industrial Education. | 6 |
| | (Full Year) | |
| 2. | Electives. | 6 semester hours |
| | Six semester hours approved by departmental advisor to be selected from: | |
| | 0996-501, 503, 504, 505, 606 | |

- II. Free Electives 7 semester hours
- Selected from among any 500 or 600 level course for which the student meets any departmental prerequisites or restrictions. Senior-graduate (400 level) courses must be approved by the graduate advisor.

- III. Thesis..... 4 semester hours
Each candidate for this program will select a thesis topic, thesis advisor, thesis committee members (minimum of two) and register according to department and college policy. An oral examination based on the completed thesis is part of the thesis requirement.

minimum: 32 semester hours

**Requirements for the Master of Arts Degree in
Industrial Education and Technology
(Option B)**

- I. Required Courses
- A. General..... 3 semester hours
0824-503 Methods and Instruments of Research..... 3
- B. Industrial Education Specialization 12 semester hours
1. Required
- 0996-502 Curriculum Construction & Course..... 3
Organization in Industrial Education
- 0996-509 Industrial Education Facilities Planning..... 3
- 0996-607 Research Seminar in Industrial Education..... 6
(Full Year)
2. Electives..... 12 semester hours
Twelve semester hours approved by departmental advisor to be selected from: 0996-501, 503, 504, 505, 606.
- II. Free Electives 9 semester hours
Selected from among any 500 or 600 level for which the student may meet any departmental prerequisites or restrictions. Senior-graduate (400 level) courses must be approved by the graduate advisor.
- III. Comprehensive Examination
A written comprehensive examination, scheduled twice each year during the fall and spring semester is required of all candidates for the Master of Arts Degree within this program option.

minimum: 36 semester hours

CERTIFICATION

The department offers three forms of certification through the Graduate Division.

1. Supervisor
2. Cooperative Industrial Education Coordinator
3. Post-Baccalaureate
 - (a) initial field
 - (b) additional field

For more details, see certification section of this catalog or contact the department graduate advisor.

INDUSTRIAL EDUCATION AND TECHNOLOGY

Course Descriptions

Y-0996-501 Historical and Contemporary Industrial Education Literature 3 sh

Material surveyed for applicability to laboratory teaching and professional improvement: historical writings, research literature, materials provided by corporations and government agencies and pertinent reference works.

Y-0996-502 Curriculum Construction & Course Organization in Industrial Education 3 sh

Development of industrial courses of study and instructional materials.

Y-0996-503 Contemporary Problems in Industrial Education 3 sh

Seminar group exploration of a current problem or issue in contemporary industrial education; a research discussion, presentation format.

Y-0996-504 Instructional Materials in Industrial Education 3 sh

The research, creation, development, and application of innovative industrial education methodology and instructional materials.

Prerequisite: 0841-400 Selection and Utilization of Educational Media, or permission of instructor.

Y-0996-505 Supervision of Industrial Education 3 sh

Principles and practices discussed and evaluated in relation to supervisory techniques, budget supplies, inventories, maintenance, safety and upgrading of in-service teachers.

Y-0996-509 Industrial Education Facilities Planning 3 sh

Planning and equipment selection: practical application of architectural aspects, floor plan layouts, equipment selection, bid preparation and two- or three-dimensional models.

Y-0996-606 Independent Study in Industrial Education I, II, or III 1-3 sh

Advanced individual study on problems beyond what can be accomplished in the classroom. Credit may be obtained for an approved industrial course or seminar related to the student's special area of interest. May be taken three times, with the graduate advisor's approval, for a total of three semester hours.

Prerequisite: Application through department office prior to registration.

Y-0996-607 Research Seminar in Industrial Education 6 sh

A survey of industrial research, technical reports, centers, institutes, laboratories and material standards. The undertaking of an industrial research and development problem, reflecting the graduate students' area of concentration, and the preparation of a publishable technical report. To run a full academic year from September to June.

Prerequisite: 0824-0503.

Y-0997-501 Principles & Philosophy of Cooperative Industrial Education 3 sh

Historic, cultural, social, governmental, economic and technical forces which affect development of cooperative industrial education programs.

Y-0997-502 Curriculum Construction in Cooperative Industrial Education 3 sh

Techniques designed to meet needs of related and laboratory teaching, and school work programs; curriculum materials especially adapted to needs of part-time cooperative trade occupational programs.

Y-0997-503 Problems in Organizing & Teaching Cooperative Industrial Education Programs **3 sh**

Various practices for coordinating high school programs with needs of local industry. Emphasis on supervisory responsibilities within the school and cooperation required with public and private agencies.

Y-0826-582 Vocational Guidance and Occupational Information **3 sh**

See interdisciplinary course description under Student Personnel Services.

The following Senior-Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

Y-0990-408	Field Studies of Industry.....	2
Y-0990-409	Cooperative Industrial Work Experience I, II or III.	2 each
Y-0990-411	Design in Industry	3
Y-0990-422	Engineering Graphics	3
Y-0990-423	Architectural Design	3
Y-0990-431	Offset Lithography.....	3
Y-0990-432	Advanced Offset Lithography.....	3
Y-0990-433	Color Photography.....	3
Y-0990-434	Color Separation	3
Y-0990-441	Wood Technology	3
Y-0990-442	Residential Construction.....	3
Y-0990-451	Plastics Processing Technology	3
Y-0990-452	Plastics Mold & Form Design-Development & Construction	3
Y-0990-461	Management & Production Technology	3
Y-0990-471	Electronic Circuit Applications	3
Y-0990-472	Industrial Electronic Circuits	3
Y-0990-482	Fluid Power.....	3
Y-0990-483	Fluidics	3
Y-0990-484	Alternative Energy Conversion Systems.....	3
Y-0990-491	Construction Technology	3
Y-0990-492	Manufacturing Technology.....	3
Y-0990-497	Historical Restoration	1-9
Y-0990-498	National/International Work Study in Technology.....	1-9

PHYSICAL EDUCATION

Graduate Advisor: Dr. Richard W. Tews

Department Chairperson: Dr. Hazel M. Wacker

The Master of Arts in Physical Education, which has been offered at Montclair State College since 1964, provides students with the opportunity to explore areas of interest and expand their knowledge through in depth study in one of four areas of specialization: Motor Learning and Performance, Curriculum and Teaching, Administration and Supervision, and Programs for the Disabled. Special facilities for research in motor learning, biomechanics and exercise physiology are offered in the Human Performance Laboratory. This is used in course work and is available for independent research by students and faculty members. The Physical Education Department is a member of the Panzer School Council.

Admission Requirements

In addition to the general requirements for admission and matriculation established by the Graduate Council, applicants must present an undergraduate major in physical education from an accredited college or university. An applicant's undergraduate records and Graduate Record Examination Aptitude Test scores must indicate a high degree of probable success in the program. Each application will be reviewed by the Division of Graduate Studies and the Physical Education Department.

Requirements for the Master of Arts Degree in Physical Education

- I. Required Courses 9 semester hours
 - 0835-575 Philosophical and Sociological Foundations of Physical Education ... 3
 - 0835-579 Advanced Measurement and Evaluation in Physical Education 3
 - 0835-503 Research Methods in Physical Education 3

- II. Areas of Specialization 9 semester hours

In addition to the required courses and the research option, students are required to select nine semester hours in one of the four following areas of specialization.

A. Motor Learning and Performance

- 0835-553 Neurological Approach to Motor Learning and Performance. 3
- 0835-555 Scientific Analysis of Sports and Physical Education Skills. 3
- *0835-556 The Psychological Basis of Motor Learning & Performance 3
- 0835-557 Perceptual Motor Learning in Physical Education 3

*556 required of all students selecting this area of specialization

B. Curriculum and Teaching

- 0835-492 Selected Topics in Physical Education. 3
- 0835-506 Physical Education Programs for Secondary Schools 3
- 0835-576 Physical Education Programs for Elementary Schools 3
- 0835-516 Selected International Aspects of Physical Education. 3
- 0835-550 Literature and Trends in Physical Education. 3

C. Administration and Supervision

- 0835-508 Administration and Supervision of Athletics & Coaching 3
- 0835-577 Administration and Supervision of Physical Education 3

0835-552	Seminar in Current Problems in Athletics	3
0835-550	Literature and Trends in Physical Education	3

D. Programs for the Disabled

Required courses for all students in this specialization:

0835-530	Individualized Programs in Physical Education for the Handicapped	3
0835-531	Practicum in Physical Education for the Handicapped	3
Choose one of the following:		
0835-553	Neurological Approach to Motor Learning and Performance	3
0835-557	Perceptual Motor Learning in Physical Education	3

III. Physical Education Electives. 6 semester hours
Any two courses may be selected from the physical education offerings, provided prerequisites are satisfied.

IV. Free Electives 6 semester hours
Two courses to be selected from any discipline outside the field of physical education.

V. Research. 3-4 semester hours
Students will select one of the following:
0835-603 Research Seminar 3
0835-600 Thesis 4

VI. Written Comprehensive or Oral Examination
Students who elect the Research Seminar must pass a written comprehensive examination as one of the requirements for the Master's degree. Those writing a thesis will present an oral defense of their work in lieu of the written comprehensive examination.

Minimum: 33-34 semester hours

PHYSICAL EDUCATION

Course Descriptions

Z-0835-503 Research Methods in Physical Education 3 sh

The theory of experimental, descriptive, historical and philosophical methods of research in physical education: bibliographical sources and references, application of measurement, data collection and analysis and formulation of a research proposal.

Prerequisite: 0835-579 Advanced Measurement and Evaluation in Physical Education.

Z-0835-506 Physical Education Programs for Secondary Schools 3 sh

A study is made of current trends in activities, programming and scheduling. The implementation of laws requiring co-ed classes, safety factors, motivation and methods of evaluation are studied and examined in depth.

Z-0835-508 Administration and Supervision of Athletics and Coaching 3 sh

Underlying principles and desirable practices from the point of view of the administrator and supervisor, and of the person supervised and subjected to administrative policies. Interviewing, observation, conducting conferences and administrative considerations.

Z-0835-516 International Aspects of Physical Education 3 sh

Systematic examination of sport and physical education in cross-cultural perspective where manifestations of the various forms of physical activities are viewed as being products of the ecological, demographic and sociocultural sub-systems. Theoretical, conceptual and methodological phases of comparative research will also be considered.

Z-0835-0530 Individualized Programs in P.E. for the Handicapped 3 sh

This course will offer a pragmatic approach to the planning and implementation in appropriate environment, of programs to meet specific needs of handicapped persons.

Prerequisite: 2001-0564 Psychology and Education of Physically and Mentally Handicapped Children.

Z-0835-531 Practicum in Physical Education for the Handicapped 3 sh

120 hours including conference time. Approval of the instructor is necessary. The student may elect to take the practicum in a nearby institution or school of the mentally retarded, emotionally disturbed, physically handicapped or sensory handicapped.

Prerequisite: 0835-557.

Z-0835-550 Survey of Literature and Trends in Physical Education 3 sh

Comprehensive survey of books, periodicals and other teaching materials in the field of physical education; outstanding authors and current leaders in physical education and their basic philosophies.

Z-0835-552 Seminar in Current Problems in Athletics (Men and Women) 3 sh

The organization, planning and administration of intramural and interscholastic sports programs for men and women. Program development, scheduling, promotion and conduct of the program and personnel selection. Other persistent problems identified by the students will be discussed as will trends in such areas as sports media, coaching and officiating.

Z-0835-553 A Neurological Approach to Motor Learning and Performance 3 sh

The psychology of motor behavior, a neuropsychological approach; integrating neuropsychological and behavioral information as a beginning toward understanding motor behavior.

Z-0835-554 Orientation in Sports Medicine 3 sh

New techniques, materials, modalities and problems related to the prevention and care of athletic injuries; current developments in the field; new conditioning concepts and activities for both the athlete and non-athlete.

Prerequisites: Courses in Kinesiology, Physiology of Exercise and Prevention and Care of Athletic Injuries.

Z-0835-555 Scientific Analysis of Sports and Physical Education Movements 3 sh

Drawing the free body diagram and calculating moments of force for a complete body motion; special related problems of body impact, equipment impact, the basic laws of mechanics and aerodynamic and fluid-dynamic problems.

Z-0835-556 The Psychological Bases of Motor Learning and Performance 3 sh

Psychological principles and research related to physical activity and educational program situations. Continued research and psychological evidence utilized to improve physical education methodology.

Z-0835-557 Perceptual Motor Learning in Physical Education 3 sh

Current theories concerning the inter-relationships of perceptual development and sensory-motor activity; implications for elementary school physical education programs.

Prerequisite: Elementary Physical Education Methods Course.

Z-0835-575 Philosophical and Sociological Foundations of Physical Education 3 sh

The historical development of modern physical education programs; the sociological factors affecting behavior in modern society applied to teaching and coaching situations.

Prerequisite: A course in the history and principles of physical education.

Z-0835-576 Programs in Physical Education for the Elementary School 3 sh

The selection of appropriate physical education activities for elementary programs based on principles of growth and development, and psychological and sociological needs. The relationship of physical education to other areas of instruction in the school curriculum, and to the secondary school program.

Prerequisite: Methods course in physical education for elementary school children.

Z-0835-577 Administration and Supervision in Physical Education 3 sh

Role of the teacher and administrator; interview, visitation, conference and other techniques in reference to student teachers, beginning teachers and experienced teachers.

Supervision of both physical education and classroom teachers.

Z-0835-579 Advanced Measurement and Evaluation in Physical Education 3 sh

New tests and techniques for determining levels of skill, growth and development, the qualities which contribute to total physical fitness. Advanced techniques for processing data.

Prerequisite: A course in educational statistics.

Z-0835-0580 Independent Study in Physical Education 1-3 sh

An experience in the pursuit of study of topics which may be outside the scope of regular curricular offerings or may be an extension of a course or courses. A student may complete a maximum of three semester hours credit in independent study.

Prerequisite: Completion and approval of independent study application form prior to registration.

Z-0835-603 Research Seminar in Physical Education 3 sh

The principles upon which physical education research is based; studies, program personnel and techniques employed in research. A research project must be presented to the physical education faculty for approval.

Prerequisite: 0835-503.

Z-0849-532 Therapeutic Recreation 3 sh

The development, supervision and coordination of therapeutic recreation programs in various types of institutional and community settings.

Prerequisite: 1220-581 or 586.

Z-0849-0551 Philosophy, Trends and Current Practices in Recreation and Leisure Services 3 sh

Presents a survey of the development of recreational philosophies and a study and evaluation of the modern philosophy in America. The organization of recreation in school and community, the importance of leadership, social and cultural implications, economic,

governmental, and leisure time influences, and a study of current practices will be undertaken.

Z-0849-563 Urban Park and Recreation Management

3 sh

Administration and policies of park and recreation agencies, including organizational structure, boards and commissions, executive leadership, decision making, personnel finance, public relations, office management, legal provisions, operational research, etc. Management procedures for metropolitan and regional parks including specialized facilities, e.g., golf courses, pools, ice rinks, etc.



SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

Philip S. Cohen, Ph.D., Dean

Graduate programs in the School of Social and Behavioral Sciences are designed to accomplish four objectives:

1. To provide the opportunity for students to acquire advanced knowledge in one of the major areas of the social or behavioral sciences.
2. To acquaint the student with the inter-relatedness of the various fields within the social and behavioral sciences as well as their relationship to other disciplines.
3. To familiarize students with the particular methodology and specialized problems of his or her field.
4. To provide students with the background to do creative and independent work both during and after their graduate careers.

Specifically, the School of Social and Behavioral Sciences offers graduate programs in (1) Social Sciences, (2) Psychology, (3) Communication Sciences and Disorders, and (4) Environmental Studies.

The social and behavioral sciences comprise a number of disciplines, the boundaries of which are constantly changing and expanding. At the same time, research with the disciplines is becoming more specialized. The necessity for constant study, therefore, presses upon everyone involved with these fields whether he or she is teaching or working in government, industry or the corporate world, or the helping professions.

The departments within the School of Social and Behavioral Sciences provide programs of an advanced character which reflect sound developments in scholarship in various fields. They also offer advanced courses for teachers who wish to improve their preparedness for specialized secondary school subjects. Finally, they aim to provide for the teacher an opportunity for keeping informed about changing techniques and problems related to teaching the social studies. The Master's degree in the social sciences offers opportunity to concentrate in a particular field: anthropology, economics, geography and urban studies, history, political science, sociology, and non-western cultures.

The interdisciplinary Master's program in Environmental Studies is designed for persons who are concerned, either professionally or by virtue of personal interest, with problems of environmental quality and protection.

The Psychology Department offers programs of a distinctly professional nature as well as those which are preparatory for more advanced degrees.

The graduate programs in speech, language and hearing rehabilitation leads to increased skills and qualifications as a therapist in public schools or in special institutions, such as hospitals, and to completion of the requirements for certification in the State of New Jersey and in the American Speech and Hearing Association. The program in learning disabilities is in accordance with the professional guidelines established by the New Jersey Association of Learning Consultants. Flexibility is enhanced by the experience offered students at one of the many off-campus affiliations or at the Psycho-educational Center which is an integral part of the School, where students receive interdisciplinary training in working with learning-disabled children.

Increasingly, the School of Social and Behavioral Sciences is serving a clientele whose background and career goals differ from those of graduate students we have served in the past. While secondary school teachers still constitute an important segment

of the graduate student body, graduate degrees in the social and behavioral sciences are more and more being pursued by (a) individuals seeking to change fields or professions, (b) individuals seeking career advancement, and (c) individuals returning to the academic world after a hiatus of some time. More students are also viewing graduate study on the Master's level as preparation for doctoral work, particularly in such areas as psychology. The different groups are able to achieve their purpose by following one of the tracks or specializations within the existing programs. At the same time, recognition of changing demands acts as a spur to the development of new programs reflecting significant trends in the social and behavioral sciences.

COMMUNICATION SCIENCES AND DISORDERS

Graduate Advisors: Dr. Elaine Barden, Dr. Warren E. Heiss, Dr. Terry Schon, Dr. Edward Shulman, Dr. Gerald Woolf

Department Chairman: Dr. Joseph S. Attanasio

Graduate students have the opportunity to specialize within the broad area of communication sciences and disorders in one of the four major tracks: (1) speech-language pathology; (2) audiology; (3) the hard of hearing and the deaf and (4) learning disabilities.

All four programs stress an interdisciplinary approach to the understanding and remediation of communication and learning disorders, with emphasis on development of clinical skills. Successful students are those who have a strong need to understand the bases of clinical procedures, who work well with or without supervision, and who, with guidance from the staff, initiate independent projects, taking responsibility for personal growth in intellectual and clinical skills.

Students should indicate their choice of specialization at the time of advisement for matriculation.

Admission Requirements

Speech-Language Pathology

Students wishing to matriculate in this area must have completed the equivalent of 30 semester hours from among the following areas:

A. Professional Education—A minimum of 9 semester hours including one course from each of the following: principles and practices of education, educational psychology and curriculum.

B. Specialization—A minimum of 12 semester hours from among the following: psychology and education of the handicapped, phonetics, anatomy and physiology of the auditory and vocal mechanisms, speech correction, speech pathology, clinical practices in speech correction, measurement of hearing (audiology).

A maximum of 150 hours of clinical practicum completed at the undergraduate level may be applied to the total of 300 hours required for the Master's degree.

Audiology and the Hard of Hearing and the Deaf

Students wishing to matriculate in this area must have a minimum of 18 semester hours from among the following: anatomy and physiology of the auditory and vocal mechanisms, speech and language development, speech pathology, measurement of hearing, auditory rehabilitation, clinical practice in audiology.

A maximum of 150 hours of clinical practicum completed at the undergraduate level may be applied to the total of 300 hours required for the Master's degree.

Requirements for the Master of Arts Degree in Communication Sciences and Disorders

- I. Basic Requirements 9 semester hours
- One of the following:
- 0824-503 Methods of Research 3
- 2001-510 Research Methods in Psychology 3
- *0824-507 Measurements and Evaluation in Cognitive Domain 3
- or
- *0824-578 Testing and Evaluation 3
- or
- *2001-578 Psychological Tests and Measurement 3
- Two of the following:
- 0808-500 Nature of Reading 3
- 1220-500 Acquisition of Speech and Language 3
- 1220-583 Language Disorders in Children 3
- Either:
- *2001-563 Theories of Learning 3
- or
- *2001-560 Advanced Educational Psychology 3
- The following electives may be taken in place of or in addition to required courses listed above by permission only.
- 1220-502 Psychology of Oral Communication 3
- 2001-561 Developmental Psychology 3
- 0842-564 Dynamics of Group Process 3
- 2001-568 Psychology of Group Dynamics 3
- 0826-570 Counseling Adults 3
- 0826-580 Principles of Guidance and Counseling 3
- 2001-582 Behavior Modification 3
- 0826-585 Group-Guidance and Counseling Activities 3
- II. Core Courses 8 semester hours
- Required of all students regardless of specialization:
- 2001-565 Psychology of Socially and Emotionally handicapped 3
- *2001-573 Physiological Psychology 3
- or
- *1220-595 Medical and Physical Bases of Learning Disabilities 3
- 2001-561 Developmental Psychology 3
- (required for Teacher of the Emotionally Disturbed program)
- 1220-620 Orientation and Observation in Special Education 2
- The following electives may be taken in place of or in addition to required courses listed above by permission only:
- 1301-445 The Inner City Family 3
- 0821-540 Social Forces and Education 3

2001-553	Urban Psychology	3
2001-564	Psychology of the Physically and Mentally Handicapped Child	3
2208-565	Sociology of Youth	3
1220-586	Education of the Handicapped	3

*Required for certification in Learning Disabilities.

III. Specialization Requirements..... 21 semester hours

Speech-Language Pathology

1220-535	Advanced Seminar in Communication Disorders	6
1220-531	Advanced Audiology	3
1220-583	Language Disorders in Children	3
1220-592	Seminar in Research in Speech Pathology	3

Electives..... 6 semester hours

Completion of 150-300 hours of clinical practicum in speech correction depending upon number of hours completed prior to matriculation of the graduate degree.

Audiology

1220-536	Seminar in Audiology	6
1220-531	Advanced Audiology	3
1220-593	Seminar in Research in Audiology	3

Elective in auditory rehabilitation..... 3
(1220-537, 569, 570 or 571)

The Hard of Hearing and the Deaf

1220-531	Advanced Audiology	3
1220-561	Clinical Practicum on Teaching the Deaf (150 hours)	3
1220-569	Teaching Total Communication to the Deaf I	3
1220-570	Teaching Total Communication to the Deaf II.....	3
1220-571	Methods of Teaching the Deaf	3
1220-578	Seminar in Research in the Hard of Hearing and the Deaf	3

Elective..... 3

Learning Disabilities

1220-580	Diagnosis and Correction of Children with Learning Disabilities I	3
1220-581	Diagnosis and Correction of Children with Learning Disabilities II.....	3
1220-582	Remediation of Basic Skills	3
1220-590	Practicum in Learning Disabilities	3
1220-589	Seminar in Research in Learning Disabilities.....	3

Electives..... 6

IV. Electives

Selection from among the following courses will be determined through advisement and will be based on student's needs and interests.

Communication Sciences

1220-522	Advanced Phonetics	2
1220-534	Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms	3
1220-572	Speech Science and Instrumentation	3

Communication Disorders

Speech Pathology

1220-511	Advanced Speech Pathology	3
1220-512	Advanced Diagnosis of Communication Disorders	3
1220-513	Parent Counseling in Communication Disorders	3
1220-514	Communication Disorders of the Aged	3
1220-515	Voice Disorders	3
1220-532	Practicum in Speech Rehabilitation	2-3
1220-584	Cleft Palate and Oral Deformities	3
1220-585	Stuttering	3
1220-591	Organization and Administration of Communication Disorders Program	3
1220-594	Independent Study	1-3
1220-533	Supervision of Speech and Hearing Programs	3

Audiology

1220-537	Hearing Aids and Hearing Aid Selection	3
1220-538	Differential Audiometry	3
1220-540	Practicum in Audiology	1-3
1220-542	Identification Audiometry and Conservation Programs	3

Deafness and Hearing Impairment

1220-574	Psychology of Deafness	3
1220-500	Speech and Language Acquisition	3
1220-501	Language Development in the Primary Grades	3

Learning Disabilities

1220-586	Education of the Handicapped	3
2001-564	Psychology and Education of the Physically and Mentally Handicapped Child	3
2001-561	Developmental Psychology	3
2001-582	Behavior Modification	3
0824-564	Dynamics of Group Process	3

Learning Disabilities

Students wishing to matriculate in this area must have:

A standard New Jersey teachers certificate, or equivalent, one year of classroom teaching experience or special instructional experience (speech correction, reading, student personnel); approval by Graduate Committee on Admission for this program; two letters of recommendation regarding teaching or therapy skills.

Note: State certification requirements for Learning Disabilities Teacher Consultants are subject to change.

Additional Departmental Requirements

1. Comprehensive project or examination.

2. Majors in speech pathology and audiology must complete a total of 300 hours of supervised direct clinical experience. Majors in Hard of Hearing and Deaf, and Learning Disabilities, must complete a minimum of 150 clock hours of supervised experience.

Up to 150 hours completed as an undergraduate will be accepted toward the requirement.

Note: Interrelated graduate programs in special education are described on page 154.

Courses are offered in this department that meet prerequisite requirements in speech pathology for admission to the graduate program. In addition, post-master's students may apply for admission to a program leading to certification for Learning Disabilities Teacher-Consultant.

A non-degree certification program for Teacher of the Handicapped is also available (See Approved Certification Programs).

Requirements for Concentration in Teacher of the Socially and Emotionally Handicapped

One course of study in the College's interdepartmental programs in special education prepares students to teach socially and emotionally maladjusted children. This concentration, coordinated by the Psychology Department, also leads to New Jersey certification in Teacher of the Handicapped (Please refer to page 154, for M.A. in Educational Psychology, Interrelated Graduate Program in Special Education.)

Post-Master's Certification Program in Learning Disabilities

A post-Master's candidate seeking certification in Learning Disabilities must complete twenty-four semester hours in the area of study listed below. Qualified teachers and therapists, however, who have already earned a Master's degree, or completed graduate studies in education, reading, speech correction, psychology, special education, or similar fields, may apply appropriate credits toward the 24 s.h. required for LDT-C certification. The student may not apply more than 15 s.h., however, if Montclair State College is to evaluate and recommend him/her for certification as Learning Disabilities Teacher-Consultant.

Note: State certification requirements for Learning Disabilities Teacher-Consultants are subject to change.

Requirement for Certificate in Learning Disabilities

The graduate advisor will examine the post-Masters applicant's transcripts of completed graduate courses in order to determine which of the following courses may be applied toward certification for Learning Disabilities Teacher-Consultant:

A. Required Studies (not necessarily in separate courses):

1. Education of the Handicapped

MSC Equivalent

2001-564 or 1220-586

2. Learning Theory	2001-563
3. Physiological Bases of Learning	2001-573 or 1220-595
4. Orientation to Psychological Testing	2001-578 or 0824-578
5. Remediation of Basic Skills	1220-582
6. Diagnosis and Correction of Learning Disabilities -	1220-580 & 581
7. 150 clock hours supervised practicum (minimum)	1220-590

B. Electives

1. Group Dynamics	0842-564; 2001-568
2. Teaching Emotionally Disturbed Child	2001-565
3. Curriculum Development for the Handicapped	2001-541
4. Child Growth and Development	2001-561
5. Language Development and Disorders	1220-563
6. Teaching of the Culturally Handicapped	2001-553; 2001-541
7. Interviewing and Counseling	0826-580; 2001-593
8. Educational Psychology	2001-560
9. Community Resources	0826-560; 1220-620

Each student's record will be evaluated by the Office of the Registrar after completing all, or the necessary part, of the 24 s.h. requirement. If work has been satisfactory completed, and all other requirements have been met, the student will be recommended to the Office of Teacher Education and Certification for certification as a *Learning Disabilities Teacher-Consultant*.

The requirements for this endorsement, in addition to the completion of the prescribed academic program, are:

1. A standard New Jersey Teacher's Certificate.
2. Three years of successful teaching experience (Montclair requires two letters of recommendation from a current or previous employer and a notarized statement verifying at least three years of full time paid employment as a teacher or clinician.)
3. A Master's degree in a related field from an accredited college.

COMMUNICATION SCIENCES AND DISORDERS

Course Descriptions

2-1220-503 Language and Communication

3 sh

Examines the influence of psychology, linguistics, and biology on the study of how adults use language and how children learn language. Topics include current theory and experimental research in psycholinguistics, the relation between language and thought, language disorders, development of communication abilities and dialect differences.

2-1220-513 Parent Counseling in Communication Disorders

3 sh

Parent-child-clinician triad analyzed with emphasis on parent counseling regarding home management of the child, interpretation of diagnostic and therapy findings and referral. Prerequisite: 1220-411 or equivalent.

2-1220-514 Communication Disorders of the Aged**3 sh**

Communication disorders associated with pathologies that tend to occur in later life, e.g., aphasia, multiple sclerosis, Parkinsonism and cerebral arteriosclerosis.

Prerequisite: 1220-410 or equivalent.

2-1220-515 Voice Disorders**3 sh**

Selected disorders of voice production. Consideration given to etiology, pathology and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions.

2-1220-522 Advanced Phonetics**3 sh**

Skill in use of phonetics in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English and sounds in foreign languages. Stress, phrasing and intonation patterns used in speaking English, with some analysis of these elements in other languages.

Prerequisite: 1220-104 or equivalent.

2-1220-533 Supervision of Speech and Hearing Programs**3 sh**

Develops skill in supervision of beginning clinicians by experienced therapists; criteria for evaluation, writing critiques and understanding interpersonal relationships that enhance teaching through criticism.

2-1220-534 Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms**3 sh**

Basic anatomy of mechanisms of speech reception and expression; the integrated functioning of the central nervous system, the autonomic nervous system and the endocrine system; abnormalities of structure and function of the speech and hearing processes; medical and surgical aspects of rehabilitation and hygiene of the ear, nose and throat. Demonstrations and supervised laboratory dissection.

Prerequisite: 1220-208 or equivalent.

2-1220-535 Advanced Seminar in Communication Disorders**6 sh**

Diagnostic, therapeutic and evaluative techniques employed in working with children and adults who have disorders of communication.

2-1220-572 Speech Science and Instrumentation**3 sh**

Analysis of speech production and reception through use of equipment designed to measure selected features of the communication process.

2-1220-586 Education of the Handicapped**3 sh**

Role of the teacher on the professional team, state and federal legislation relating to handicapped children and adults and community resources for the special child.

2-1220-591 Organization and Administration of Communication Disorders Program**3 sh**

Problems of organizing and administering a comprehensive communication disorders program in various settings.

2-1220-594 Independent Study**1-3 sh**

Students select an area of communication sciences and disorders and, with advisement, study the literature in the field, observe related programs at special schools and centers,

and write reports on findings. Regular conferences with instructor for guidance and evaluation.

2-1220-620 Orientation and Observation in Special Education 2 sh

Community resources, professional roles and responsibilities and team operations. On-site visits to special classes and rehabilitation centers or special class guest lecturers.

Audiology and Teaching Hard of Hearing and Deaf

2-1220-531 Advanced Audiology 3 sh

Increase skill in administering tests for pure-tone and speech reception thresholds; evaluation and interpretation of test results and analysis of client histories. Hearing aid evaluation, measurement of recruitment and tests for psychogenic deafness and malingering; pre- and post-surgical audiometry and special problems of differential diagnosis in testing children.

Prerequisite: 1220-468 or equivalent.

2-1220-536 Seminar in Audiology 6 sh

Significant issues in audiology and opportunities for observation and participation in advanced clinical procedures. Minimum of 150 clock hours of practicum experience on and off campus required.

2-1220-537 Hearing Aids and Hearing Aid Selection 3 sh

Principles and procedures involved in fitting hearing aids and differential selection based on audiometric findings. Characteristics of hearing aids and ear molds.

2-1220-538 Differential Audiometry 3 sh

Sophisticated and advanced audiometric tests used in differential diagnosis of hearing problems. Demonstration and analysis of functional hearing loss tests, evoked response audiometry, difference limen tests, G.S.R. audiometry and tests for central auditory problems.

2-1220-540 Practicum in Audiology 1-3 sh

Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment.

Prerequisite: 1220-538.

2-1220-541 Advanced Practicum in Audiology 1-3 sh

Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment.

Prerequisite: 1220-538.

2-1220-542 Identification Audiometry and Conservation Programs 3 sh

Approaches to identification of hearing problems in school children and hearing conservation programs. Industrial audiology: noise pollution, damage risk criteria and employment-connected hearing disability.

2-1220-561 Clinical Practicum in Teaching the Deaf 3 sh

Observing and teaching in a school or program for the deaf. Required of students who have little or no previous experience. Total of 125 hours must be completed with no more than 35 hours credited for previous experience elsewhere.

2-1220-569 Teaching Total Communication to the Deaf, Part I 3 sh

This course is the first part of a 6 s.h. sequence. It is designed to provide students with a general orientation to all aspects of communication as it relates to deafness. The role of total communication within the educational setting will be explored in depth and students will develop basic skill in manual communication.

2-1220-570 Teaching Total Communication to the Hard of Hearing and Deaf II 3 sh

Methods and materials of teaching speech to children with severe hearing impairment. Techniques involving auditory training with amplification and group hearing aids included. Prerequisite: 1220-569.

2-1220-571 Methods of Teaching the Deaf and Hearing Impaired 3 sh

Pre-school to the adult level, with emphasis on language development and compensatory learning.

2-1220-574 Psychology of Deafness 3 sh

Effects of deafness and hearing loss on the intellectual, social and emotional development of the child; congenital and acquired hearing loss and the behavior of hearing members of the client's world.

2-1220-575 Language Development for the Deaf 3 sh

Communication problems of the deaf with emphasis on application of psycholinguistics theory to development of language skills.

2-1220-576 Aural Rehabilitation for Adults 3 sh

Advanced study of techniques for developing lipreading and auditory training. Social and vocational aspects of communication emphasized.

2-1220-578 Seminar in Research in the Hard of Hearing and Deaf 3 sh

Significant problems in the field of deafness and hearing impairment; evaluation of published research projects; critical analysis and experimental design.

2-1220-593 Seminar in Research Audiology 3 sh

Significant problems in the field of audiology; evaluation of published research projects; critical analysis and experimental design.

Language and Learning Disorders

2-1220-465 Seminar in Black Language 3 sh

Survey of Black language patterns and their relation to standard English in the Black speech community. Application to the goals of the speech therapist in predominantly Black schools. (Senior-Graduate).

Prerequisite: Course in phonetics and psycholinguistics.

2-1220-500 Speech and Language Acquisition 3 sh

The nature of language and language development in young children. Acquisition of phonological, semantic, pragmatic and syntactic systems studied in framework of biological, cognitive and linguistic theory.

2-1220-501 Language Development in the Primary Grades 3 sh

Language activities in the elementary school curriculum; techniques for enhancing oral language proficiency in the school age child.

2-1220-502 Psychology of Oral Communication 3 sh

Speech and language in the individual; problems of communication that lead to confusion of meaning and misunderstanding. Psychology of persons who are handicapped in speech, hearing and/or reading, including those with hysterical or psychogenic impairments. Contributions of learning theory and psycholinguistics.

2-1220-580 Diagnosis and Correction of Children with Learning Disabilities I 3 sh

Conceptual model of learning disabilities; parameters of the diagnostic evaluation of the child who is failing in school. Tests demonstrated; students trained in analyzing results and prescribing individualized educational plans.

2-1220-581 Diagnosis and Correction of Children with Learning Disabilities II 3 sh

Continuation of 1220-580. Developing instruction plans from diagnostic data. Parameters of managing learning; disabled children within and outside the regular classroom; consultation techniques for use with classroom teachers.

Prerequisite: 1220-580.

2-1220-582 Remediation of Basic Skills (Methods and Materials) 3 sh

Techniques for remediation of reading, writing, spelling, arithmetic, speaking and listening problems with children who are performing poorly in school.

Prerequisites: 1220-580, 581.

2-1220-583 Language Disorders of Children 3 sh

Psycholinguistic components of language, factors involved in language development and language disorders associated with developmental lag, childhood aphasia, deafness, retardation and emotion problems.

Prerequisites: 1220-500 or equivalent for Speech Pathology majors, 1220-580 for Learning Disabilities majors.

2-1220-589 Seminar in Research in Learning Disabilities 3 sh

Significant problems in field of learning disabilities investigated, and published research projects evaluated. Critical analysis and experimental design.

Prerequisites: 1220-580, 581, 582.

2-1220-590 Practicum in Learning Disabilities 3 sh

Clinical diagnosis and teaching of children with learning disabilities. Supervision by departmental staff is given to fulfill the 150 hour requirement. Arrangements can be made for both on-campus and off-campus experiences. (Matriculated L.D. majors).

Prerequisites: 1220-580, 581, 582, and permission of graduate advisor.

2-1220-595 Medical and Physical Bases of Learning Disabilities 3 sh

Critical dimensions of the neurological and physiological growth of the child. The scope and meaning of the pediatric and neurological examination and relevance of medical data to explain learning disorders. Aspects of drug and nutritional therapy will be explained.

Speech Pathology

2-1220-511 Advanced Speech Pathology 3 sh

Modern techniques of speech rehabilitation and review of research findings in voice, ar-

tication, rhythm and symbolization disorders. Speech rehabilitation integrated with related health services and educational services in schools and special centers.

Prerequisite: 1220-410 or equivalent.

2-1220-512 Advanced Diagnosis of Communication Disorders 3 sh

Continuation of diagnosis procedure including tests for multiple-handicapped children with communication disorders. Opportunities for interviewing parents, testing and report writing.

2-1220-514 Communication Disorders of the Aged 3 sh

Communication disorders associated with pathologies that tend to occur in later life, i.e., aphasia, multiple sclerosis, Parkinsonism and cerebral arteriosclerosis.

Prerequisite: 1220-410 or equivalent.

2-1220-515 Seminars in Voice Disorders 3 sh

Selected disorders of voice production; etiology, pathology and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for laryngectomized and for persons with cleft palate conditions.

2-1220-532 Practicum in Speech Rehabilitation 3 sh

Practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences; planning and supervising speech therapy sessions, providing rehabilitative services, interviewing applicants and administering audiometric tests.

Prerequisite: 60 clinical hours in speech practicum.

2-1220-535 Advanced Seminar in Communication Disorders 6 sh

Diagnostic, therapeutic and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology.

Prerequisite: Permission of graduate advisor.

2-1220-584 Cleft Palate and Oral Deformities

Etiology and characteristics of cleft palate and oral deformities in children and adults; speech therapy and surgical repair procedures. Unit on tongue thrust therapy included.

2-1220-585 Stuttering

Principles and methods of speech therapy with children and adults who stutter. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and school life. Demonstrations with clients who stutter serve as the basis for study and discussion.

2-1220-592 Seminar in Research in Speech Pathology 3 sh

Significant problems in the field investigated and published research projects evaluated. Critical analysis and experimental design.

ENVIRONMENTAL STUDIES

Graduate Advisor: Dr. W. Augustus Rentsch

Program Director: Dr. David Robertson

This interdisciplinary program leads to the Master of Arts degree and is designed to prepare students for professional careers which require an understanding of environmentally significant data and their application to problems of environmental quality. The program permits concentrated study in selected areas to serve the needs of teachers, persons interested in public policy making and/or resource management, and persons more broadly concerned with problems of environmental protection. The program is administered by the Department of Environmental, Urban and Geographic Studies. The facilities of the New Jersey School of Conservation, operated by the College at Stokes State Forest, are available as an additional resource for the study of the natural environment.

Admission Requirements

The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program. Students with weak undergraduate preparation for environmental studies will be required to complete prerequisite courses at the undergraduate level and/or appropriate graduate level.

Requirements for the Master of Arts Degree in Environmental Studies

(The degree requirements are currently under review and the listing below is subject to change)

- I. Basic Required Courses 12 semester hours
 - 4951-501 Environmental Studies—Physical 3
 - 4951-502 Environmental Studies—Social and Behavioral 3
 - 0401-570 Ecology 3
- II. Professional Preparation 6 semester hours
 - 4951-508 Environmental Problem Solving 3
 - 4951-509 Environmental Change and Communication 3
- III. Special Emphasis Component 14-15 semester hours
 - A. Environmental Education 15 semester hours
 - 4951-550 Environmental Education (Supervision) 3
 - 0824-503 Methods of Research 3
 - Approved Electives—one elective must be a 3 s.h. residence requirement at the N.J. School of Conservation at the 500 level. . . . 9
 - B. Environmental Health 15 semester hours

An undergraduate major or minor in a health profession area is considered a basic admissions requirement.

Courses are to be selected from among the offerings of the Department of Health Professions in consultation with the program director or Graduate Advisor.
 - C. A concentration in Environmental Management has been approved. The focus is on operational skills involved in environmental policy-making, administration and analysis. Consult Graduate Advisor for details.

Minimum: 32-33 semester hours

ENVIRONMENTAL STUDIES

Course Descriptions

- 4-4951-501 Environmental Studies—Physical** **3 sh**
 A systems concept utilizing physical science. Provides some understanding of the abiotic environment to life. The atmosphere, hydrosphere, and lithosphere are examined as natural, man-modified, and human environments.
- 4-4951-502 Environmental Studies—Social/Behavioral** **3 sh**
 A systems concept utilizing social and behavioral sciences. Provides some understanding of the relationships of the cultural environment to life. The social and behavioral conditions upon the grouping of individuals are examined in natural and man-modified environments.
- 4-4951-503 Methods in Environmental Research** **3 sh**
 An overview of the methodology of research in environmental science and an understanding of the problems of conducting such research: formulation of a research problem; use of reference materials; statistics; measurement; instruments of research; and writing the research report.
- 4-4951-508 Environmental Problem Solving** **3 sh**
 Field training to define environmental problems, synthesize data, and evaluate alternative solutions.
 Prerequisite: Six semester hours of environmental studies or permission of instructor.
- 4-4951-509 Environmental Change and Communication** **3 sh**
 Prepare students as professional environmentalists; communication and journalism strategies; theory of persuasion; and roles as catalyst, solution giver, process helpers, and resource person.
 Prerequisite: 4953-501, 502, 550 or 508.
- 4-4951-531 Independent Study in Environmental Studies** **1-4 sh**
 Student must develop statement of goals and phasing for completion, prior to consultation with instructor.
- 4-4951-550 Environmental Education (Supervision)** **3 sh**
 Foundations of environmental education: historical, theoretical, and conceptual. Includes models, gaming, encounters, and teaching strategies. A prerequisite course for all environmental education 500 level courses.
- 4-4951-551 Conservation Education** **3 sh**
 Provide background in natural resource management: wildlife; fisheries; forests; water and related components of spaceship earth. Includes field trips.
- 4-4951-601 Research Project in Environmental Studies** **3 sh**
 To complete the research proposal initiated in the research methods course.
 Prerequisite: Appropriate 503.
- 4-0843-495 Workshop Utilizing Natural Environments** **1 sh**
 Basic understanding of how natural environments may be used to supplement classroom experiences in natural science, social studies, humanities and outdoor pursuits. Does not meet resident requirement.

4-0843-496 Field Studies in Social Studies and Natural Science 1 sh

Provides an understanding of how the humanities and sciences, taught in natural environments, develop environmental sensitivity. Does not meet resident requirement.

4-0843-497 Field Studies in Social Studies and Outdoor Recreation 1 sh

Provides an understanding of how outdoor pursuits and social studies may be taught, using natural environments, to develop environmental sensitivity.

4-0843-500 Curriculum Development in Environmental Education

Development of environmental education curricula, courses of study, and instructional materials K-12.

Prerequisite: 4951-550.

4-0843-501 Outdoor Teaching Sites for Environmental Education 2 sh

Field-oriented course uses lecture, discussion and field activities; the integration of school sites into ongoing school curricula. Individualized and group project work on actual outdoor site development.

4-0843-502 American Heritage Skills 3 sh

Life-style of the American Colonies.

4-0843-503 Humanities and the Environment 3 sh

Man in nature, man against nature, and man and nature.

4-0843-504 Field Techniques for Teaching the Humanities 3 sh

Communication, perception, observation, interpretation and other investigations.

4-0843-554 Practicum in Environmental Education 3 sh

Implementation of environmental education programs in both public and private institutions. Other emphasis depend upon student's needs.

Prerequisites: 4951-550, 4951-555 or permission of instructor.

PSYCHOLOGY

Graduate Advisors: Dr. Walter Duryea, Dr. Paul Locher, Dr. Charity Runden
Department Chairman: Dr. John Seymour

The department of psychology offers three distinct graduate programs and one inter-related program.

1. The Master of Arts in Educational Psychology aims to increase the student's knowledge of the application of psychological theory to educational practice. A specialization in Human Sexuality is being offered as part of the program leading to a Masters of Arts in Educational Psychology.

2. The Master of Arts in Psychology is designed primarily as an intermediate degree. This program prepares for advanced studies in many psychological fields such as personality and counseling, school, social, industrial and developmental psychology.

3. The School Psychologist Certification Program is designed to meet the need for school psychologists by offering an integrated sequence of courses and supervised school, clinical and community experiences.

4. The Interrelated Program in Special Education and Special Pupil Services: Teacher of the Emotionally and Socially Disturbed leads to the Master of Arts degree and New Jersey Teacher of the Handicapped certification.

Admission Requirements

Candidates for the Master of Arts in Educational Psychology must meet College requirements and be approved by departmental committee.

Candidates for the Master of Arts in Psychology must meet the following departmental requirements:

1. 12 undergraduate credits in psychology.
2. A laboratory course in experimental psychology and a course in statistics.*
3. Miller Analogies Test and the Advanced Psychology Test of the Graduate Record Examination.
4. Approval by the departmental committee.

Candidates for the School Psychologist Certification Program must meet the following departmental requirements:

1. The Miller Analogies Test and the advanced GRE in psychology or education.
2. Two additional letters of reference.
3. Approval by the departmental committee.

Note: Final application date is December 31.

Candidates for the Interrelated Program in Special Education and Special Pupil Services must meet the following departmental requirements:

1. Miller Analogies Test.
2. Interview with and approval by the departmental committee.
3. Preparation in psychology and education courses is desirable. Students lacking minimal preparation will be required to take prerequisite courses. Teaching certification is not required.

Note: Minimum residency of one year and one summer is also required.

*If the student lacks experimental psychology or statistics, he or she may be admitted as a prematriculated graduate student by including such requirements in his or her program to be taken without credit.

Requirements for the Master of Arts Degree in Educational Psychology

Graduate Advisor: Dr. Paul Locher

I.	Required Courses.....	15 semester hours
	2001-510 Research Methods in Psychology	3
	2001-560 Advanced Educational Psychology	3
	2001-561 Developmental Psychology.....	3
	2001-578 Psychological Tests and Measurements	3
	2001-660 Seminar in Educational Psychology	3
II.	Educational Foundations.....	6 semester hours
	2001-538 Ethnopsychology (also 2202-538).....	3
	2001-553 Urban Psychology	3
	2008-579 Community Resources and Youth	3
	2202-534 Anthropology and Education	3
	2202-535 Ethnology.....	3
III.	Specialization	6 semester hours
	2001-555 Psychological Aspects of Poverty	3
	2001-564 Psychology and Education of the Physically and Mentally Handicapped	3
	2001-565 Psychology and Education of the Socially and Emotionally Handicapped	3
	2001-566 Psychology and Education of the Gifted.....	3
IV.	Electives.....	6 semester hours
	To be selected with the approval of the Graduate Advisor/Program Director.	
V.	Comprehensive Examination	
VI.	Thesis (Elective)	4
		Minimum: 33 semester hours

Requirements for the Master of Arts Degree in Educational Psychology (Specialization in Human Sexuality)

Graduate Advisor: Dr. Charity Runden

I.	Required Courses.....	12 semester hours
	2001-510 Research Methods in Psychology	3
	2001-560 Advanced Educational Psychology	3
	2001-561 Developmental Psychology.....	3
	2001-660 Seminar in Educational Psychology	3
II.	Foundations.....	6 semester hours
	2202-538 Ethnopsychology	3
	2001-553 Urban Psychology	3
	2208-579 Community Resources and Youth	3
	2202-535 Ethnology I	3
	2001-446 Today's Woman	3

III.	Specialization	15 semester hours
2001-548	Sex Education in Schools and Agencies	3
3001-542	Workshop in Psychology—Sex Education	3
2001-567	Abnormal Psychology	3
2001-580	Personality	3
2001-641	Perspectives in Human Sexuality	3
2001-645	Sexual Function & Dysfunction	3
IV.	Electives	3 semester hours
	To be selected with the approval of the Graduate Advisor/Program Director	
V.	Comprehensive Examination	

Minimum: 36 semester hours

**Requirements for the Master of Arts Degree in Educational Psychology
(Interrelated Graduate Program in Special Education and Special Pupil Services:
Teacher of the Behaviorally Disturbed)**

Graduate Advisor: Dr. Walter P. Duryea

One course of study in the College's interdepartmental programs in special education prepares students to teach socially and emotionally maladjusted children. This concentration leads to New Jersey Certification in Teacher of the Handicapped.

I.	Required Courses	12 semester hours
2001-578	Psychological Tests and Measurements	3
	Two of the following:	
0808-500	Nature of Reading	3
0808-511	Case Studies in Reading Difficulties	3
	and either:	
2001-560	Advanced Educational Psychology or	3
2001-563	Theories of Learning	3
	Electives approved by advisor may be taken in place of, or in addition to, required courses if equivalencies of the above are approved.	
II.	Core Courses	8 semester hours
	Required:	
2001-561	Developmental Psychology	3
2001-565	Psychology and Education of Socially and Emotionally Handicapped Children	3
2001)		
-620	Orientation and Observation in Special Education	2
1220)		
	Electives approved by advisor may be taken in place of, or in addition to, required courses if equivalencies of the above are approved.	
III.	Specialized Requirements	23 semester hours
2001-540	Teaching and Remediation Techniques	3
2001-541	Adaptive Curriculum and Program Planning	3
2001-545	Seminar in Behavioral Disturbances of Children I	3

2001-546	Seminar in Behavioral Disturbances of Children II	3
2001-553	Urban Psychology	3
2001-663	Independent Study	2
2001-664	Practicum in Teaching Behaviorally Disturbed Children I (Student Teaching)	3
2001-665	Practicum in Teaching Behaviorally Disturbed Children II	3

IV. Comprehensive Examination

Note: For candidates not presenting a teaching certificate, 0829-400 Teacher, School and Society is a prerequisite course.

Minimum: 43 semester hours

Requirements for the Master of Arts Degree in Psychology

Graduate Advisor: Dr. Paul Locher

- I. Required Courses
- 2001-510 Methods of Research
- 2001-520 Advanced General Psychology I
- 2001-521 Advanced General Psychology II
- 2001-550 Quantitative and Statistical Methods
- 2001-600 Thesis
- II. Elective Courses
- To be selected with the approval of the Graduate Advisor/Program Director
- III. Free Electives
- IV. Comprehensive Examination: written examination precedes acceptance of a thesis outline and an oral examination at completion of thesis.
- V. Department Colloquium: presentation of proposed theses and current research. Graduate students and faculty invited.

Minimum: 34 semester hours

Requirements for School Psychologist Certification (N.J. State Certificate)

- I. Educational Foundations
- 0821-521 Contemporary Educational Thought
- 2001-538 Ethnopsychology
- 2001-553 Urban Psychology
- 2001-555 Psychological Aspects of Poverty
- 2001-560 Advanced Educational Psychology
- 2001-660 Seminar in Educational Psychology
- 2002-535 Ethnology I
- 2208-565 Sociology of Youth

- II. Education of the Handicapped 6 semester hours
- 2001-564 Psychology and Education of the Physically
and Mentally Handicapped 3
- 2001-565 Psychology and Education of the Socially
and Emotionally Handicapped 3
- III. Testing and Clinical Techniques 25 semester hours
- 2001-510 Research Methods in Psychology 3
- *2001-550 Quantitative and Statistical Methods 3
- *2001-574 Individual Intelligence Testing 3
- *2001-575 Projective Techniques I 3
- *2001-576 Projective Techniques II 3
- *2001-578 Psychological Tests and Measurements 3
- 2001-590 Diagnostic Case Studies 3
- *2001-593 Clinical Interviewing 3
- 2001-661 Practicum in School Psychology 3
- *2001-662 School Psychologist Externship 3
- IV. Personality and Behavioral Development 12 semester hours
- 2001-561 Developmental Psychology 3
- 2001-563 Theories of Learning 3
- 2001-567 Abnormal Psychology 3
- 2001-573 Physiological Psychology 3
- 2001-580 Personality 3
- 2001-582 Behavior Modification 3
- V. Electives: Select courses to balance the program, with permission of
graduate advisor Minimum: 60 semester hours
- Interrelated Program in Special Education and Special Pupil Services: Teacher of the
Socially and Emotionally Handicapped. See page 154.
- *Required for certification. See Director of Program for externship arrangements.

PSYCHOLOGY

Course Descriptions

- 7-2001-503 Language and Communication** **3 sh**
 Influence of psychology, linguistics and biology on the learning and use of language. Psycholinguistics, language and thought, language disorders, development of communication, dialect differences.
- 7-2001-510 Research Methods in Psychology** **3 sh**
 Non-laboratory introduction to correlational and experimental methods of research in psychology applied to practical issues. Required of students matriculated in the Educational and General Psychology programs.
 Prerequisite: A graduate course in psychology.
- 7-2001-520 Advanced General Psychology I** **3 sh**
 Learning and Motivation (first half term), personality and abnormal psychology (second half term). Open to matriculated candidates in General Psychology program only. Must be taken during the first year of the program.
- 7-2001-521 Advanced General Psychology II** **3 sh**
 Sensation and perception (first half term), social psychology (second half term). Open to matriculated candidates in General Psychology program only.
 Prerequisite: 2001-520.
- 7-2001-538 Ethnopsychology** **3 sh**
 See Anthropology 2202-538.
- 7-2001-540 Teaching and Remediation Techniques with Behaviorally Disturbed Children** **3 sh**
 Teaching and remediation of basic skills with behaviorally disturbed students; methods and materials in reading, mathematics, and language arts.
 Prerequisite: Permission of instructor.
- 7-2001-541 Adaptive Curriculum and Program Planning for Behaviorally Disturbed Children** **3 sh**
 Modifying the school curriculum, program planning, and behavioral management options for the behaviorally disturbed students.
 Prerequisite: Permission of instructor.
- 7-2001-542 Workshop in Psychology—Human Sexuality** **3 sh**
 Psychologists, health educators, religious leaders, sociologists, biologists, physicians and media specialists lecture and participate in group discussions: sex education in the home, marriage and family relations, genetics, birth control, sex and religion, developmental psychology and sex role, sex and the self-concept.
- 7-2001-545 Seminar in Behavioral Disturbances of Children** **1-3 sh**
 Survey and analysis of educational strategies and models for behaviorally disturbed students, e.g. psycho-educational, behavioral, psychodynamics. Day to day student-teacher adjustments and behavior management. Integrated with concurrent practicum. Open only to matriculated students.
 Prerequisite: Permission of instructor.

- 7-2001-546 Seminar in Behavioral Disturbances of Children II** **3 sh**
 Selected issues, research and theory in education and related services to behaviorally disturbed students; e.g. involving and working with family; therapeutic techniques and processes related to student personality and behavior disorders, technology—innovation and accountability.
 Prerequisites: 2001-545 and 665, or its equivalent and permission of instructor.
- 7-2201-547 Woman: A Cross-Cultural Perspective** **3 sh**
 The physiological and psychological aspects of women studied cross-culturally and their implications for today's society will be the focus of this course. Morphological and psychological developments from conception to death in various cultures; inferences about the roles of women in our society will be made.
- 7-2001-548 Sex Education in Communities and Agencies** **3 sh**
 Techniques for working with communities and agencies in setting up courses and offering materials for community programs in sex education.
- 7-2001-549 Psychology of the Adult Learner** **3 sh**
 Methods and materials of learning which can be adapted to adult education. Identifying educational needs, understanding problems of the adult learner, overcoming learning difficulties, motivation and other factors affecting learning and counseling procedures. Course individually programmed commensurate with the student's background and professional goals.
- 7-2001-550 Quantitative and Statistical Methods** **3 sh**
 Principles and techniques of data analysis and experimental design in psychology, estimation of parameters, and hypothesis testing. Open only to matriculated students.
 Prerequisites: Permission of instructor and a qualifying examination in basic statistics.
- 7-2001-551 Advanced Experimental Psychology** **3 sh**
 Laboratory course on contemporary research issues in psychology. An original research project will be required. Recommended for students intending to enter doctoral programs.
 Prerequisites: Undergraduate Experimental Psychology and 2001-550.
- 7-2001-552 General Social Psychology** **3 sh**
 Theory, methodology and research findings. Biological basis of social behavior, socialization, attitudes development and change, value systems, group processes and conflict.
 Prerequisite: One course in psychology.
- 7-2001-553 Urban Psychology** **3 sh**
 Theoretical and empirical literature on cities and those who live in and near them. Interaction of individual psychological factors, social psychological factors and urban structures. Problems and issues related to crowding and density, poverty, housing, urban planning, neighborhoods, race relations.
 Prerequisite: One course in psychology.
- 7-2001-555 Psychological Aspects of Poverty** **3 sh**
 Relationships between individual and group psychological factors and poverty as a major domestic issue. Critical approaches to psychological theories of poverty.
 Prerequisite: 2001-553.
- 7-2001-556 Environmental Psychology** **3 sh**
 Interaction of the physical environment with human behavior. Population density and

crowding; environmental perception, historic environmental attitudes; architecture and behavior; unusual environments; man and the natural world.

7-2001-560 Advanced Educational Psychology 3 sh

Focus on the learner and the learning process in school situations. Motivation, acquisition of skills, ideas and attitudes, technological and other innovations in teaching and learning and evaluation of teacher-learning.

Prerequisite: One course in psychology.

7-2001-561 Developmental Psychology 3 sh

Theoretical issues and research findings on mental processes from pre-natal life through adolescence.

Prerequisite: One course in psychology.

7-2001-562 Dynamics of Human Behavior 3 sh

Relationship of social forces to mental health. Environmental factors which contribute towards behavioral and learning pathologies.

7-2001-563 Theories of Learning 3 sh

Review of current learning theory and research and the implications for education. Open only to matriculated students.

Prerequisite: Two courses in psychology or permission of graduate advisor.

7-2001-564 Psychology and Education of Physically and Mentally Handicapped Children 3 sh

Current practices and problems in the education of children with physical and mental handicaps. Designed for teachers, counselors, supervisors and administrators who work with such children or who wish to prepare for school and community leadership in developing facilities.

Prerequisite: 2001-561.

7-2001-565 Psychology and Education of Socially and Emotionally Handicapped Children 3 sh

Practice and problems in the education of socially and emotionally handicapped children.

Prerequisite: 2001-561.

7-2001-566 Psychology and Education of the Gifted 3 sh

Picture of bright and gifted young people in contemporary American life. Various practices involved in education, as well as the psychological characteristics of this group and socio-emotional development.

Prerequisite: 2001-561 or permission of the instructor.

7-2001-567 Abnormal Psychology 3 sh

Models and selected research in psychopathology, physical illness, psychosomatic and somatopsychic disorders, neurosis, psychosis, environmental factors in relation to organic factors.

Prerequisite: 2001-580.

7-2001-568 Psychology of Group Dynamics 3 sh

Theories of group dynamics and illustrative application to industrial, marital, political, interracial and professional life; personal participation by the student in a group interactive process. Open only to matriculated students.

7-2001-573 Physiological Psychology 3 sh

The physiological bases of normal and abnormal behavior with emphasis on the anatomy, physiology, and pathology of the human nervous system. Basic principles through complex behaviors, psychosurgery, and biofeedback.

Prerequisite: One course in psychology.

7-2001-574 Individual Intelligence Testing 3 sh

Administration, scoring and interpretation of individual intelligence tests. Student is required to use the Stanford-Binet Scale, the Wechsler Intelligence Scale for Children, and the Wechsler Adult Intelligence Scale.

Prerequisite: Approved certification candidacy in the School Psychology program.

7-2001-575 Projective Techniques I 3 sh

Basic instruments of projective testing, particularly the Rorschach and Thematic Apperception Test, from the standpoints of basic research and the mechanics of administration and scoring.

Prerequisite: Approved certification candidacy in the School Psychology program.

7-2001-576 Projective Techniques II 3 sh

Moves from the theoretical to the practical application of projective tests. Student required to administer, score and analyze individual cases. Major emphasis on the Rorschach and Thematic Apperception Test.

Prerequisite: 2001-575.

7-2001-578 Psychological Tests and Measurements 3 sh

Survey of theory, construction and application of psychological tests. Open only to matriculated students.

Prerequisite: 0824-503, 2001-510 or 2001-550.

7-2001-580 Personality 3 sh

Major theories and clinical and experimental findings. Open only to matriculated psychology majors or permission of instructor.

Prerequisite: 2001-520 or 561.

7-2001-581 Motivation 3 sh

Nature and development of motives and their role in behavior. Open only to matriculated psychology majors.

Prerequisite: 2001-520.

7-2001-582 Behavior Modification 3 sh

Experimental findings, design of experiments, and practice in the application of learning principles to changing behavior. Student will perform some experiments.

Prerequisite: 2001-563 or equivalent.

7-2001-583 Sensation and Perception 3 sh

Sensory and perceptual processes. Includes: visual, auditory and other stimuli, psychophysics and the development of perceptual abilities and the effects of learning motivation and set on perceptual processes. Open only to matriculated psychology majors.

Prerequisite: 2001-521.

7-2001-590 Diagnostic Case Studies 3 sh

Learning to use diagnostic material and to write up diagnostic findings. The unique value

of various diagnostic tools and the criteria for selection in relation to the present school problem.

Prerequisite: Approved candidacy in the School Psychology Certification program, 2001-574, 575.

7-2001-592 Special Diagnostic Techniques **3 sh**

Designed for students who are already competent in basic individual testing techniques. Specialized tests and techniques; evaluation of handicapped children.

Prerequisite: 2001-574, 575 and permission of the graduate advisor.

7-2001-593 Clinical Interviewing **3 sh**

Clinical interviewing under rigid supervision as an essential part of a practicum experience. Diagnostic features of interviewing and inter-personal relationships between the psychologist and the client.

Prerequisite: Permission of the graduate advisor and instructor.

7-2001-600 Thesis I **4 sh**

Individual research under faculty direction. Student presents a thesis proposal at a department colloquium and takes an oral examination upon completion of the thesis.

Prerequisite: Permission of thesis advisor.

7-2001-620 Orientation and Observation in Special Education **3 sh**

Community resources, professional roles and responsibilities and team operations. On-site visits to special classes and rehabilitation centers, and special guest lectures.

Prerequisite: Permission of instructor.

7-2001-641 Perspectives in Human Sexuality **3 sh**

Specialists lecture and discuss concepts of human sexuality: abortion; human sexuality and the mentally retarded child; world population; myths and fallacies of human sexuality; the community and sex education; sexual aberrations; touch and human sexual response; male and female sexual response; sexual problems of college students; the humanization of obstetrics; current research in sex and sex education.

Prerequisite: Two graduate courses in human sexuality.

7-2001-645 Sexual Function and Dysfunction **3 sh**

Seminar in current trends and practices in sexual therapy. Historical material and research studies in the area of sexual function and dysfunction—from Freud to Masters and Johnson.

Prerequisites: 2001-542, 641, 567.

7-2001-660 Seminar in Educational Psychology **3 sh**

Opportunity to investigate and apply the techniques of research in the psychology field.

Prerequisites: 2001-510, 560 and matriculation in Psychology.

7-2001-661 Practicum in School Psychology **3 sh**

Supervised experience in assessment counseling and consultation procedures. Designed to increase competency in psychological techniques required in school setting.

Prerequisites: Approved certification candidacy in School Psychology program and permission of graduate advisor.

7-2001-662 School Psychology Externship **3 sh**

Students serve as apprentice psychologists in cooperating school districts or agencies. A fully certified school psychologist, employed in the cooperating district, or an appropriate

clinician and the college supervisor make periodic visits and conduct a series of seminars to be scheduled on campus.

Prerequisites: Approved certification candidacy in School Psychology program and permission of graduate advisor.

7-2001-663 Independent Study 1-3 sh

Research which is not part of the thesis; readings or field experiences under the supervision of any regular faculty member of the Psychology Department. On one topic during one semester for 1, 2 or 3 semester hours. The student must negotiate an agreement on the planned activities with the instructor prior to registration. Open only to matriculated psychology majors.

Prerequisite: Permission from graduate advisor and instructor.

7-2001-664 Practicum in Teaching Behaviorally Disturbed Children I 3 sh

Experience in teaching seriously and moderately emotionally disturbed children. Open only to matriculated majors in the program for the teaching of emotionally disturbed children.

Prerequisite: Permission of the program coordinator.

7-2001-665 Practicum in Teaching Behaviorally Disturbed Children II 3 sh

Continues the experience described in 2001-664. Open only to matriculated majors in the program for the teaching of emotionally disturbed children.

Prerequisite: Permission of the program coordinator.

7-2001-670 Introduction to Psychotherapy 3 sh

Theories, research and practices in individual and group psychotherapy; introduction to approaches to treatment of emotional maladjustment and behavioral pathology.

Prerequisite: Permission of instructor.

7-2001-672 Practicum in Psychotherapy 3 sh

Supervised practice in individual and group counseling and psychotherapy; personal growth through self-understanding.

Prerequisite: 2001-670 or permission of instructor.

The following Senior Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current regular bulletin.

2001-442	Curriculum and Methods in Sex Education	3
2001-446	Today's Woman	3

SOCIAL SCIENCES

Graduate Advisors: Dr. Bertha B. Quintana, Anthropology
 Dr. Suresh A. Desai, Economics
 Prof. Bertrand B. Boucher, Environmental, Urban and Geographic Studies
 Dr. Richard J. Barker, History
 Dr. Lois A. More, Non-Western Cultures
 Dr. Edward W. Johnson, Political Science
 Dr. George T. Martin, Sociology

The Master of Arts degree in social sciences offers concentrations in anthropology, economics, geography, history, non-western cultures, political science, sociology, and urban studies. Degree candidates do a major portion of their work and prepare for a final comprehensive examination in one of these individual fields.

Admission Requirements

In addition to the general requirements for admission to the graduate program at Montclair State, candidates must present an undergraduate record showing a total of at least 30 semester hours in the social sciences and/or history. For candidates with weak undergraduate preparation in the field of concentration, prerequisite courses, not for graduate credit, may be required.

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Anthropology)

- I. Required Courses..... 9 semester hours
 - *2202-531 Human Variation..... 3
 - *2202-535 Ethnology..... 3
 - At least one of the following:
 - *2202-539 Prehistoric North America 3
 - *2202-540 Social Anthropology and History..... 3
 - *2202-541 Cognitive Anthropology..... 3
- II. Anthropology Electives..... 6-9 semester hours
 - 2202-532 Anthropology of Cities 3
 - 2202-533 Spanish Cultural Influences in the U.S. 3
 - 2202-534 Anthropology and Education 3
 - 2202-536 Cultural Diversity 3
 - 2202-537 Responding to Cultural Change 3
 - 2202-538 Ethnopsychology 3
 - 2202-539 Prehistoric North America 3
 - 2202-540 Social Anthropology and History..... 3
 - *Anthropology elective may be substituted for candidates with proper equivalent course experience.
 - 2202-541 Cognitive Anthropology..... 3
 - 2202-547 Woman: A Cross-Cultural Perspective..... 3
 - 2202-601 Independent Anthropological Research..... 3

- III. Related Social/Behavioral Science and/or History Electives . . . 6-9 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examination 2 semester hours
 - 2202-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600, Thesis (4 sh) in lieu of the comprehensive examination.

Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Economics)

Candidates interested in economics as an area of concentration should contact the chairman of the department for information.

- I. Required for all but undergraduate Economics majors:
 - 2204-501 Economics Analysis 3
- II. Economics Electives 9-12 semester hours
 - 2204-502 Financial Institutions and Monetary Policy 3
 - 2204-503 Economic Problems of the Third World 3
 - 2204-508 Economics of Public Management 3
 - 2204-510 Urban Economics: Problems and Policies 3
 - 2204-540 Development in Economic Education 3
 - 2204-541 Foundations of Contemporary Economic Thought 3
 - 2204-542 Economic Fluctuations and Forecasting 3
 - 2204-543 United States in the World Economy 3
 - 2204-544 Government and Business 3
 - 2204-545 Economics of Labor 3
- III. Related Social/Behavioral Science and/or History 6-9 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examinations 2 semester hours
 - 2204-603 Independent study in preparation for written examination given in March and October.

Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in Geography)

It is highly recommended that candidates for the concentration in geography have an undergraduate major or minor in geography or its equivalent from an accredited college or university. Candidates without this background may be required to make up deficiencies in their undergraduate programs.

- I. Required Courses 6 semester hours
 - 2206-520 Landscapes in Transition 3
 - 2206-521 Research Methods in Geography & Urban Studies 3

- II. Geography Electives 9-12 semester hours
 - 2206-501 Environmental Geography 3
 - 2206-502 Problems in Economic Geography 3
 - 2206-503 Culture Regions 3
 - 2206-504 Pro-Seminar 3
 - 2206-505 Population-Resources-Environment: A Study in Human Ecology 3
 - 2206-509 Water Resource Systems 3
 - 2206-510 Urban Systems and Planning 3
- III. Related Social/Behavioral Science and/or History Electives 6-9 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examination 2 semester hours
 - 2206-603 Independent study in preparation for written examination given in March and October. Candidates may register for Departmental 600 Thesis (4 sh) in lieu of the comprehensive examination.

Minimum: 32 semester hours

Requirements for the Master of Arts Degree in Social Sciences (Concentration in History)

- I. Required Courses 3 semester hours
 - 2205-501 New Interpretations in History 3
 - or
 - 2205-502 History and the New Social Studies 3
- II. History Electives 12-15 semester hours
 - 2205-501 New Interpretations in History 3
 - 2205-502 History and the New Social Studies 3
 - 2205-511 Seminar in American Colonial History 3
 - 2205-512 The American Revolution, 1763-87 3
 - 2205-513 Problems of the New Nation, 1789-1828 3
 - 2205-514 Crisis of American Nationalism, 1828-1876 3
 - 2205-517 Age of Franklin D. Roosevelt 3
 - 2205-518 Urban History: National Trends in N.J. Cities 3
 - 2205-519 The U.S. in the Nuclear Age 3
 - 2205-520 United States—Far Eastern Relations 3
 - 2205-521 Civil War and Revolution in Chinese History 3
 - 2205-522 Revolutionary Russia, 1905-21 3
 - 2205-523 History of Soviet Diplomacy 3
 - 2205-524 History of American Business Leaders 3
 - 2205-525 History of American Labor, 1870-1970 3
 - 2205-526 The Industrialization of America, 1865-1900 3
 - 2205-527 The Industrialization of Europe 3
 - 2205-529 Europe of the Dictators, 1919-39 3
 - 2205-530 Nationalism in Modern India 3
 - 2205-532 Modernization in Japanese Cultural History 3

2205-533	French Revolution and Napoleon	3
2205-537	19th Century European Intellectual History	3
2205-540	Europe as a World Civilization	3
III.	Related Social/Behavioral Science Electives	6-9 semester hours
IV.	Free Electives	6 semester hours
V.	Reading Seminar and Comprehensive Examination	2 semester hours
2205-603	Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis (4 sh) in lieu of the comprehensive examination.	

Minimum: 32 semester hours

**Requirement for the Master of Arts Degree in Social Sciences
(Concentration in Non-Western Cultures)**

I.	Required Courses	15-18 semester hours
2202-535	Ethnology	3
	or	
2202-536	Cultural Diversity	3
	And at least two of the following:	
2205-520	United States—Far East Relations	3
2205-521	Civil War and Revolution—Chinese History	3
2205-530	Nationalism in Modern India	3
2205-532	Modernization in Japanese Cultural History	3
	And one of the following:	
2207-523	The Politics of Developing Areas	3
2207-524	Africa and Asia in World Politics	3
	Suggested Social/Behavioral Science and/or History Electives	6-9 semester hours
2202-537	Cultural Stability and Change	3
2202-540	Social Anthropology and History	3
2206-503	Culture Regions	3
2208-567	Power and Social Stratification	3
II.	Free Electives	6 semester hours
III.	Reading Seminar and Comprehensive Examination	2 semester hours
4910-603	Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis (4 sh) in lieu of the comprehensive examination.	

Minimum: 32 semester hours

**Requirement for the Master of Arts Degree in Social Sciences
(Concentration in Political Science)**

I.	Required Courses	3 semester hours
2207-502	Modern Political Analysis	3

- II. Political Science Electives 12-15 semester hours
- 2207-501 Public Administration and Public Policy 3
- 2207-512 Origin and Development of the Constitution 3
- 2207-521 History and Political Thought 3
- 2207-522 Great Britain and the Commonwealth 3
- 2207-523 Politics of Developing Areas 3
- 2207-524 The Third World in the International System 3
- 2207-551 Contemporary Constitutional Law 3
- 2207-552 The President and Congress 3
- 2207-553 The Federal Judicial Process 3
- 2207-554 American Political Thought 3
- III. Related Social/Behavioral Sciences and/or History
Electives 6-9 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examination 2 semester hours
- 2207-603 Independent study in preparation for written examination
given in March and October. In special cases, candidates
may register for Departmental 600 Thesis (4 sh)
in lieu of the comprehensive examination.

Minimum: 32 semester hours

**Requirements for the Master of Arts Degree in Social Sciences
(Concentration in Sociology)**

- I. Required Courses 9 semester hours
- 2208-560 Sociological Theory 3
- 2208-568 Seminar: Sociological Research Methods I 3
- 2208-571 Seminar: Sociological Inquiry 3
- II. Sociology Electives 9 semester hours
- 2208-559 Sociology of Deviance 3
- 2208-561 The Construction of Social Theory 3
- 2208-562 Social Change 3
- 2208-563 Self and Society 3
- 2208-564 Social Planning 3
- 2208-565 Sociology of Youth 3
- 2208-566 The Metropolitan Community 3
- 2208-567 Power and Social Stratification 3
- 2208-569 Seminar: Sociological Research Methods II 3
- 2208-570 Independent Project 3
- 2208-572 Selected Problems in Sociology 3
- 2208-573 Sociology of City Sub-Areas 3
- 2208-574 Sociology of Cultural and Ethnic Groups 3
- 2208-575 Sociology of Voluntary Membership Institutions 3
- 2208-576 The Family as an Institution 3
- 2208-577 Sociology of Poverty in the U.S. 3
- 2208-579 Community Resources and Youth 3
- 2208-580 The Sociology of Higher Education 3

- III. Related Social/Behavioral Science and/or History Electives 6 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examination 2 semester hours
- 2208-603 Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis (4 sh) in lieu of the comprehensive examination.

Minimum: 32 semester hours

**Requirements for the Master of Arts Degree in Social Sciences
(Concentration in Urban Studies)**

- I. Required Courses 9 semester hours
- 2206-550 Urban Studies and Policy Analysis 3
- 2206-551 The Metropolitan Economy. 3
- 2206-610 Urban Studies Seminar* 3
- *To be taken only after the candidate has completed 2206-550, 551 and 9 semester hours of Urban Studies electives.
- II. Urban Studies Electives. 9 semester hours
- 2001-553 Urban Psychology 3
- 2202-532 Anthropology of Cities 3
- 2204-545 Economics of Labor and Manpower 3
- *2205-518 Urban History: National Trends in New Jersey Cities 3
- 2206-510 Urban Systems and Planning 3
- 2206-511 Urban and Regional Planning 3
- *2206-521 Research Methods in Geography and Urban Studies 3
- 2207-501 Public Administration and Public Policy. 3
- 2208-566 The Metropolitan Community. 3
- 2208-573 Sociology of City Sub-Areas 3
- 2208-579 Community Resources and Youth 3

*Recommended

- III. Related Social/Behavioral Sciences and/or History Electives. . . . 6 semester hours
- IV. Free Electives 6 semester hours
- V. Reading Seminar and Comprehensive Examination 2 semester hours
- 2206-603 Independent study in preparation for written examination given in March and October. Candidates may register for Departmental 600 Thesis (4 sh) in lieu of the comprehensive examination.

Minimum: 32 semester hours

ANTHROPOLOGY

Course Descriptions

1-2202-531 Human Variation

3 sh

The study of various races from the perspective of physical anthropology. Theories and explanations of human variations, racial types in the modern world, as well as misconceptions concerning race and intelligence and race and culture.

1-2202-532 Anthropology of Cities

3 sh

A cross-cultural investigation of urbanism and urbanization. Utilizing anthropological monographs, the comparative method reveals recurrent patterns of adaptation to urban environments.

1-2202-533 Spanish Cultural Influences in the U.S.

3 sh

The cultural heritage of Spanish-speaking America. Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

1-2202-534 Anthropology and Education

3 sh

Advanced seminar on the relationship of culture to learning, and of anthropology to educational issues and problems. Group work and guided individual research on the multi-cultural use of anthropological concepts and methodologies in the study of cultural transmission.

Prerequisite: 6 semester hours in graduate anthropology courses, or permission of the instructor.

1-2205-535 Ethnology

3 sh

A graduate introduction to the "science of peoples, their cultures and life histories as groups." Ethnographic and ethnological methodology and theory. Primarily for graduate students with limited or no previous course work in cultural anthropology.

1-2202-536 Cultural Diversity

3 sh

Descriptive, historical and theoretical anthropological works provide the basis for studying likenesses and differences among folk and urban cultures, their historical development, and interrelationships between differing aspects of culture.

Prerequisite: 2205-535 or equivalent.

1-2202-537 Responding to Culture Change

3 sh

Emphasis on the dynamics of cultural preservation, transmission, and change. Factors and conditions which retard and/or stimulate culture change in transcultural perspective; the psycho-cultural consequences of rapid change.

Prerequisite: 2202-535 or equivalent.

1-2202-538 Ethnopsychology

3 sh

Interdisciplinary course on convergencies of theoretical and methodological concepts from anthropology and psychology. Personality in culture; cultural influences on cognition; personality under stress; cultural psychiatry; and creativity in culture. Interdisciplinary field work.

Prerequisite: Previous course work in anthropology, psychology, or permission of the instructor.

1-2202-539 Prehistoric North America**3 sh**

General background in native American archaeology, and theory and method in this sub-discipline. Selected culture areas and problems relating to time depth, cultural interaction, and the nature of archaeological evidence north of Mexico.

1-2202-540 Social Anthropology and History**3 sh**

The relationship of social anthropology to history. The study of history as a cultural system; sources and methods utilized in reconstructing the histories of preliterate societies and the "inarticulate" sectors in complex societies.

1-2202-541 Cognitive Anthropology**3 sh**

How different peoples organize and use their cultures; data from formal ethnography, semantic analysis, ethnoscience and componential analysis for purposes of studying culture and building culture theories.

Prerequisite: Previous course work in ethnology, ethno-psychology or linguistics.

1-2202-547 Woman: A Cross-Cultural Perspective**3 sh**

Physiological and psychological aspects of women studied cross-culturally, and their implications for contemporary society. Morphological and psychological developments from conception to death in various cultures, inferences about the roles of women in American society. An interdisciplinary course.

1-2202-601 Independent Anthropological Research**3 sh**

Under faculty guidance, the student works independently throughout the academic year on a delimited problem in anthropology. Course includes presentation of proposal, execution and write-up of research, and oral defense of findings.

Prerequisite: Permission of the graduate advisor and instructor.

1-2202-603 Reading Seminar in Anthropology**2 sh**

Required of all M.A. candidates concentrating in anthropology. Directed independent study in preparation for 3 hour comprehensive examination.

ECONOMICS

Course Descriptions

3-2204-501 Economic Analysis

3 sh

The resource allocation and income distribution implications of households and firms under varying degrees of competition.

Prerequisite: Not open to undergraduate economics majors.

3-2204-502 Financial Institutions and Monetary Policy

3 sh

This course analyzes the structure and functioning of the monetary and financial system. The component parts and the system as a unit will be examined as they interrelate to affect the economy. Topics include Commercial Banking System, Federal Reserve System, financial markets, financial intermediaries, determination of the level and structure of interest rates, and contemporary problems both theoretical and applied in the area of monetary policy.

Prerequisite: 2204-501 or equivalent.

3-2204-503 Economic Problems of the Third World

3 sh

A survey of major economic problems of the Third World. The economic structure of developing countries and general theories of economic development. Evaluation of policy alternatives for their development. Possible economic relationships of First and Second Worlds with the Third World.

Prerequisite: Undergraduate course in economics or permission of the instructor.

3-2204-508 Economics of Public Management

3 sh

Application of capital theory in the decision-making processes of government; alternative approaches to government project evaluation and important practical issues encountered by state development planners. Specific applications of project analysis in the area of physical and human resource management such as water resource management, public health, and education.

Prerequisite: 2204-501 or equivalent.

3-2204-510 Urban Economics: Problems and Policies

3 sh

The location of economic activities, the growth of cities and the origins of some urban problems in a market economy. Limited emphasis on the problems of location and congestion due to agglomeration in non-market economics.

Prerequisite: 2204-501 or permission of instructor.

3-2204-540 Development in Economic Education

3 sh

Insights into recent experiments incorporating economic education into the curriculum K-12; restructuring of curriculum to promote economic understanding. Materials, written and audio-visual, designed for economic education. Guest lectures supplement the experience of the course instructor.

Prerequisite: 2204-501 or equivalent.

3-2204-541 Foundations of Contemporary Economic Thought

3 sh

Antecedents of current economic theory; economics as a cumulative science; the works of the creative economists; the uses and limitations of economic theory.

Prerequisite: 2204-501 or equivalent.

3-2204-542 Economic Fluctuations and Forecasting 3 sh

Theories to account for variations in business activity. Macroeconomic models and other forecasting approaches; economic fluctuations in the United States; proposals for reducing fluctuations. Harrod Domar model; Modern Theory of Growth.

Prerequisite: 2204-501 or equivalent.

3-2204-543 United States and the World Economy 3 sh

Principles of international finance, monetary relations and trade; contemporary international monetary and trade problems and policies; the economic aspects of current American foreign policy.

Prerequisite: 2204-501 or equivalent.

3-2204-544 Government and Business 3 sh

The evolution of government influences on the functioning of the American economy; the causes and consequences of government regulation and control; the importance of economic analysis; the foundation of public policies.

Prerequisite: 2204-501 or equivalent.

3-2204-545 Economics of Labor 3 sh

Principal trends in the industrial and occupational distribution of labor; current developments in labor-management relations in both private and public sectors; market trends and institutional factors that determine employment, wage rates, fringe benefits and industrial peace.

Prerequisite: 2204-501 or equivalent.

3-2204-603 Reading Seminar in Economics 2 sh

Required of all Masters Degree candidates concentrating in Economics, this seminar entails directed independent study in preparation for a 3-hour written comprehensive examination.

The following Senior-Graduate courses may be elected with special permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

3-2204-403	Comparative Economics Systems	3
3-2204-405	Collective Bargaining in the Public Sector	3
3-2204-415	Economics of Social Problems	3
3-2204-497		
& 498	Economics of Independent Study	3

HISTORY

Course Descriptions

5-2205-501 New Interpretations in History

3 sh

Designed to help teachers keep up to date in the fields of American, European and Non-Western history. Major trends and developments in the study of history in the light of recent representative examples of historical research and interpretation.

Prerequisite: Open only to History candidates or students with Social Studies certification.

5-2205-502 History and the New Social Studies

3 sh

Designed to assist teachers, administrators and supervisors in acquiring a comprehensive view of modern materials, methods and curricula in history and the social sciences. Critical evaluation; implications for total school programs and for actual use in the classroom.

Prerequisite: Open only to students with Social Studies certification, or permission of the instructor.

5-2205-511 Seminar in American Colonial History

3 sh

The forces and conditions of the colonial period which contributed to the shaping of American political and economic institutions, social practices and ideals, intellectual outlooks, and attitudes toward Europe.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-512 The American Revolution, 1763-87

3 sh

The causes and course of the American Revolution from both British and American viewpoints, including analysis of economic, political, social and intellectual factors.

5-2205-513 Problems of the New Nation, 1789-1828

3 sh

The growth of political institutions under the Constitution, the gaining of respect as a new country in the family of nations, the establishment of economic credit, and the rise of American nationalism.

5-2205-514 The Crisis of American Nationalism, 1828-1876

3 sh

The crisis in American nationalism from Jackson through Reconstruction as the country's Constitution, party system, and social structure contended with the disruptive effects of territorial expansion, the factory system, slavery and the new immigration.

5-2205-517 Age of Franklin D. Roosevelt

3 sh

An opportunity to study that part of recent American history centering about Franklin Delano Roosevelt. While concentrating on domestic aspects of American life, attention is given also to foreign affairs and their impact on the daily lives of Americans.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-518 Urban History: National Trends in New Jersey Cities

3 sh

An advanced survey of the urban dimension in American history and of urban history as a discipline. Late 19th and 20th century national trends are pin-pointed within the development of Paterson, Passaic, Jersey City, Newark and their suburbs.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-519 The United States in the Nuclear Age 3 sh

The role of the United States in world affairs in the period 1939 to the present; the impact of domestic affairs on foreign policy.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-520 U.S.-Far Eastern Relations 3 sh

United States relations with China and Japan, 1842 to the present; the men who formulated and implemented U.S. foreign policy.

5-2205-521 Civil War & Revolution in Chinese History, 1911-1949 3 sh

The transformation of China from Empire to Peoples Republic; Chinese concepts of revolution and the intellectual, political and social changes which preceded the formation of the Peoples Republic in 1949.

5-2205-522 Revolutionary Russia, 1905-1921 3 sh

The historical forces of 19th and 20th century Russia which led to the Bolshevik Revolution of November, 1917 and to the consolidation of Soviet power by 1921.

5-2205-523 History of Soviet Diplomacy 3 sh

Changes in the ideological determinants of Soviet diplomacy contrasted with fluctuations in internal and external political and economic policies. Contributions of leading Soviet statesmen to diplomatic history.

5-2205-0524 History of American Business Leaders 3 sh

Designed to familiarize students with major developments in American business history. The mutual impact of business and society is investigated through biographical studies of leading American businessmen.

5-2205-525 History of American Labor, 1870-1970 3 sh

The American worker from the period after the Civil War to the present, with concentration on social, political and economic behavior as well as the union movement.

5-2205-526 The Industrialization of America, 1865-1900 3 sh

The causes and nature of the industrialization of the American economy after the Civil War; factors responsible for rapid economic growth; the impact of changing productive techniques on American institutions and human welfare.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-527 The Industrialization of Europe 3 sh

European economic development with major attention to the period since about 1750; comparing economic growth during the 19th and 20th centuries in Britain, France, Germany, Italy and Russia.

5-2205-529 Europe of the Dictators, 1919-1939 3 sh

The political, social, economic and intellectual developments in the major states of western Europe during the interwar period, with emphasis on varieties of fascism.

5-2205-530 Nationalism in Modern India 3 sh

A cultural and political history of India from 1800 to the present; the contributions of Hindu nationalism and British liberalism to the Indian independence movement and the post-1947 democratic experiment.

5-2205-532 Modernization in Japanese Cultural History**3 sh**

Modernization in East Asia with focus on Japan. Japanese experience in adjusting new world forces of the 19th and 20th centuries considered against the background of her traditional values and institutions. Comparisons with China and Korea.

5-2205-533 French Revolution and Napoleon**3 sh**

The background of the French Revolution, its changing course and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon, 1799-1814.

5-2205-534 France of the Republics**3 sh**

The development of modern France since 1870; political, economic and intellectual conditions and trends through the Third, Fourth and Fifth Republics.

5-2205-537 Nineteenth Century European Intellectual History**3 sh**

Romantic, utilitarian, conservative, liberal and early existential streams of thought in 19th century Europe; the impact of these intellectual movements on European society.

Prerequisite: Open only to History or Social Science candidates or students with Social Studies certification.

5-2205-540 Europe as a World Civilization**3 sh**

General analysis and reappraisal of the place of Europe in world history. The development, distinctive contributions and future prospects of European civilization examined in the light of contemporary world conditions.

5-2205-603 Reading Seminar in History**2 sh**

Required for all master's degree candidates concentrating in History. This seminar entails directed independent study in preparation for a three-hour written comprehensive examination in the area of concentration. Candidates should register for the seminar in the semester preceding the examination date:

Registration	Examination
Fall	March
Spring	October



GEOGRAPHY AND URBAN STUDIES

Course Descriptions

- 4-2206-501 Environmental Geography** **3 sh**
 Spatial distribution of energy in the atmosphere treated in terms of natural factors and man's induced changes (atmospheric pollution). Incoming sun energy as modified by man is traced through the atmosphere, vegetation, soil and water.
 Prerequisite: 2206-520 or 521.
- 4-2206-502 Problems in Economic Geography** **3 sh**
 Research course examines spatial patterns of economic activities. Stress on current methodology and research interests.
 Prerequisite: 2206-520 or 521.
- 4-2206-503 Culture Regions** **3 sh**
 Seminar investigation of man's role in changing the face of the earth. Emphasis on spatial perception, and cultural attitudes towards space as well as the diffusion process.
 Prerequisite: 2206-520 or 521.
- 4-2206-504 Pro-Seminar in Geography** **3 sh**
 Research on selected problems in Geography. Problems will vary according to instructor.
 Prerequisite: 2206-520 or 521.
- 4-2206-505 Human Environment** **3 sh**
 Discussion of population in relation to the physical environment, objectives and skills of numerous culture groups will be examined to clarify existing regional variations in the man-land relationship.
 Prerequisite: 2206-520 or 521.
- 4-2206-509 Water Resource Systems** **3 sh**
 The spatial patterns of the water resource, both surface and ground water. Processes affecting availability and techniques of estimation.
 Prerequisite: 2206-520 or 521.
- 4-2206-510 Urban Systems and Planning** **3 sh**
 The complexity of the city and its modification by means of planning; the systems approach to urban study; the ecological base; different models of urban systems; the impact of technological change; the hierarchy of urban regions; planning in the existing systems and creating new ones.
 Prerequisite: 2206-520 or 521.
- 4-2206-511 Urban and Regional Planning** **3 sh**
 Urban and regional planning analyzes planning goals at an integral level. Urban and regional planning are rooted in the need to anticipate social and economic change in space and how it needs to be organized to enhance the functions of the physical plant and conserve the habitat twenty and more years into the future. Data gathering and analysis, graphic presentation and model building are an integral part of the course.
 Prerequisites: Open only to Social Science MA candidates or permission of the instructor.
- 4-2206-520 Landscapes in Transition** **3 sh**
 The field in historical perspective, with emphasis upon contemporary trends; philosophi-

cal roots and quest for theory. Analyzes theory and methods of application and their relationships in order to understand the role of applied in contrast to theoretical geography.

4-2206-521 Research Methods and Techniques in Geography and Urban Studies 3 sh

Advanced research techniques, beginning with census reports, government surveys and reports from other agencies. Field research both cultural and physical; mapping techniques; the design of appropriate scale and data transformation to familiarize the range of possibilities and the need for careful choice of data and maps. Computer applications in geographic problem solving.

4-2206-550 Urban Studies and Policy Analysis 3 sh

Interdisciplinary study of urbanization, the processes that produce and shape urban agglomerations. From this holistic perspective the interaction of different social, cultural, economic, political and planning forces examined for their impact upon the resulting system.

Prerequisite: Undergraduate background in Social Sciences.

4-2206-551 The Metropolitan Economy 3 sh

The spacing, location and size of cities, the role of transportation in city rhythms and intra- and inter-city relationships. Urban design planning juxtaposed with multi-faceted decision-making processes for an examination of their relative position in the management of urban systems.

Prerequisite: Undergraduate background in Social Sciences, 4905-550.

4-2206-603 Reading Seminar in Geography and Urban Studies 2 sh

Required of all Master's Degree candidates concentrating in Geography and Urban Studies, this semester entails directed independent study in preparation for a 3-hour written comprehensive examination. Candidates may register for departmental 600 thesis (4sh) in lieu of the comprehensive examination.

4-2206-610 Urban Studies Seminar 3 sh

The seminar is designed to analyze concepts and contents in order to formulate a holistic view of the city. Benchmark papers and research frontiers will be investigated.

Prerequisites: 4905-550, 551 and 9 semester hours of urban courses.

Partial list of electives acceptable for the concentration in Urban Studies.

2001-553	Urban Psychology
2001-555	Psychological Aspects of Poverty
2202-533	Spanish Culture in the U.S. Today
2204-545	Economics of Labor
2205-518	Urban History of Northern New Jersey
2205-526	The Industrialization of America, 1865-1900
2206-510	Urban Systems and Planning
2206-521	Research Methods and Techniques in Geography and Urban Studies

POLITICAL SCIENCE

Course Descriptions

6-2207-501 Public Administration and Public Policy

3 sh

Literature and developments in the field of public administration from Woodrow Wilson to the current comparative public administration movement. Techniques of administrative management, and personnel and financial administration in the federal bureaucracy.

Prerequisite: An undergraduate course in administration or permission of the instructor.

6-2207-502 Modern Political Analysis

3 sh

Required of all Master's Degree candidates concentrating in political science, this course deals with the methodologies and orientations that have guided the study of political phenomena. Utility of methods and the validity of theories are examined by reference to data related to specific political systems. Perspective is comparative and theoretical.

Prerequisite: 2207-300 or equivalent, or permission of instructor.

6-2207-512 Origin and Development of the U.S. Constitution

3 sh

The roots and influences that determine the nation's basic political document. The role of the Marshall Court in shaping the Constitution.

Prerequisite: A course in American Government or permission of the instructor.

6-2207-521 History of Political Thought

3 sh

Systematic analysis of the three main patterns of political discourse: a) traditions of the order, b) freedom and society, and c) pre-Socratic thinkers to Herbert Marcuse. Leading concepts of each tradition related to their historical and institutional contexts.

Prerequisite: A course in political theory or permission of the instructor.

6-2207-522 Great Britain and the Commonwealth

3 sh

Origins, membership and working institutions of the British Commonwealth of Nations. Problems of the Commonwealth since 1945, in light of Britain's altered position in international and European affairs.

6-2207-523 The Politics of Developing Areas

3 sh

Introduction to the field of political change and stability in the developing areas. Analysis of those theoretical and empirical factors that have contributed to the continuing search for political modernization in the emerging states of Africa, Asia and Latin America.

6-2207-524 The Third World in the International System

3 sh

The position and role of African and Asian nation-states in contemporary international relations; mutual relations; their encounters with the major powers; involvement in general international organizational and diplomatic activity and domestic political and economic factors that affect or underlie their international interactions.

6-2207-551 Contemporary Constitutional Law

3 sh

The Supreme Court's decisions in the area of public law. Critical analysis and in-depth study of the first Ten Amendments, especially as related to the Court's recent decisions.

Prerequisite: A course in Constitutional Law or permission of the instructor.

6-2207-552 The President and Congress

3 sh

Organization, structure and powers of the national executive and legislative branches of government. Emphasis on legislative executive relationships, nature and functioning of

the legislative powers, respective roles of the President and Congress in the formulation of public policy in a modern democracy.

Prerequisite: A course in American Government or permission of the instructor.

6-2207-553 Federal Judicial Process

3 sh

The federal courts as a political subsystem: court organization, civil and criminal procedures, judicial behavior of federal judges, interactions between federal courts, relations with clientele groups and other branches of the federal government, the flow and content of litigation, and relations with state court systems.

Prerequisite: A course in American Government or State and Local Government or permission of the instructor.

6-2207-554 Seminar in American Political Thought

3 sh

The various interpretations of American political thought. Nature and limitations of the liberal ethos underlying the American political and constitutional system; the controversy over the "bias" of American pluralism.

Prerequisite: A course in American Political Thought or permission of the instructor.

6-2207-603 Reading Seminar in Political Science

2 sh

Required of all master's degree candidates concentrating in Political Science, this seminar entails directed independent study in preparation for a three-hour written comprehensive examination.

Two of the allowable Senior Graduate courses may be elected with permission of the graduate advisor. Course descriptions may be found in the current undergraduate bulletin.

2207-400	American Constitutional Law: The Federal System
2207-401	American Constitutional Law: Civil Rights & Liberties
2207-402	Government and Politics of Africa
2207-403	Government and Politics of China & Japan
2207-404	Governments and Politics of India & South Asia
2207-405	Governments and Politics of Latin America
2207-406	Governments and Politics of the Middle East
2207-407	The Government and Politics of the USSR
2207-408	The Development of Political Thought to Machiavelli
2207-409	Modern Political Thought
2207-410	Directed Study
2207-411	Black Politics in America
2207-412	Government and Politics in Communist East Europe
2207-413	Afro-Asian Foreign Politics
2207-416	Selected Topics in Political Science
2207-425	Politics of the Federal Bureaucracy
2207-429	Quantitative Analysis in Political Science
2207-430	International Law

SOCIOLOGY

Course Descriptions

- 8-2208-559 Sociology of Deviance** **3 sh**
 The efforts of such people as Lemert, Becker, Morton, Matza and others to develop theories concerning crime, delinquency, mental illness and other issues which can be viewed as social problems.
- 8-2208-560 Sociological Theory** **3 sh**
 The practical and philosophical methods of the seminal sociological theorists, investigated and evaluated in terms of many conceptions of adequate scientific procedure.
- 8-2208-561 The Construction of Social Theory** **3 sh**
 Sociological theory as an artful practice. Theorists, such as Durkheim, Weber, Marx, Freud, Skinner and Merton discussed as courses of action.
- 8-2208-562 Social Change** **3 sh**
 The dynamics of contemporary societies: sacred and secular movements, technological and cultural change, protest and revolution, and 20th century nationalism. The effect of change considered in relation to individuals, groups, institutions and total societies.
- 8-2208-563 Self and Society** **3 sh**
 The relationships between the human individual and his social environment; the formation, maintenance and transformation of self or identity; the structure and process of small groups; symbolic communication; role theory, cognitive dissonance and intergroup conflict.
- 8-2208-564 Social Planning** **3 sh**
 The many elements and considerations in planning for a community, a state or a nation. The social context of planning; projective techniques; budgets, master plans, development programs and area proposals. The human, the economic, the ecological. Students will be expected to undertake a social planning project. A basic knowledge of statistics and the use of statistical data is desirable.
- 8-2208-565 Sociology of Youth** **3 sh**
 Socialization processes acting upon young people; the role of family, neighborhood, school and community; the effects of failures in these socializing agencies; changing relations among age grades; quantitative studies of the culture of youth with comparisons to other age grades.
- 8-2208-566 The Metropolitan Community** **3 sh**
 The many dimensions of the metropolitan community: human factors, problems an area faces, political difficulties, interaction between the center city and the other parts of the community. Emphasis on New York-New Jersey.
- 8-2208-567 Power and Social Stratification** **3 sh**
 Conceptual, theoretical and empirical approaches to sociological studies of power and social inequalities. Each is studied as it was formulated by classical theorists and refined by contemporary researchers on power, power elite, the ruling class, class interests, class consciousness, alienation, class struggle, and social mobility, etc., through comparative perspectives.
 Prerequisite: One or more Sociology courses at 500 level or permission of instructor.

8-2208-568 Social Research Methods I**3 sh**

Elements of sociological methods: study design, hypotheses development, data collection techniques, use of primary and secondary sources, field techniques. Participation in a multi-city field research laboratory project designed and executed co-jointly with graduate students and faculty of cooperating colleges. The field project is a unique experience because of the diversity of communities investigated, and because of participation with a team of researchers.

8-2208-569 Social Research Methods II**3 sh**

Continuation of Social Research Methods I. The elements of method included are: coding techniques, analysis and scientific report writing.

8-2208-570 Independent Projects**3 sh**

Each student seeking an M.A. degree with an emphasis in Sociology will be guided in the development and execution of an independent project. The faculty advisor will be chosen by mutual agreement of the student and faculty member to guide the project, and advise on the data to be collected in the Social Research Laboratory field project. The student will enroll for Independent Projects in the Fall semester in which he enters the Social Research Laboratory. This enables the student to obtain individual guidance on the selection and design of the independent project.

8-2208-571 Seminar: Sociological Inquiry**3 sh**

Develops competence needed for the critical assessment of sociological literature, the formulation of productive research problems and the sophisticated pursuit of inquiry. Intensive study of a number of readings dealing with certain crucial areas of sociological concern. Also gives students coming into Sociology concentration without a broad background remedial experience in dealing with advanced concepts, theories and methods. Prerequisite: Permission of instructor.

8-2208-572 Selected Problems in Sociology**3 sh**

The intensive exploration of a general problem in Sociology. Participants contribute research into an aspect of the problem. Formed at the initiative of a department member or in response to student's interest with consent of the instructor.

8-2208-573 Sociology of the City Sub-Areas**3 sh**

The social forces in the inner city and other sub-areas; existing and emerging cultural strengths and positive supportive patterns; problems related to poverty, housing, education, employment, leisure and aesthetics.

8-2208-574 Sociology of Cultural and Ethnic Groups**3 sh**

The major cultural and ethnic groups in American society; relationships among groups; the significance of these relationships to the structure of society. The student will prepare an in-depth report of the group of his choice.

8-2208-575 Sociology of Voluntary Membership Institutions**3 sh**

Descriptive and theoretical analysis of constructive action patterns in leisure and other voluntary membership institutions; structural and functional significance of these behaviors to the American social order.

8-2208-576 The Family as an Institution**3 sh**

The family unit as an institution within society; the family in contemporary American



society; the family sociologically examined as an institutional form, a social system in process and a socializing agency.

8-2208-577 Sociology of Poverty in the U.S.

3 sh

Poverty as a major domestic problem; the causes and effects of social deprivation; historical and contemporary efforts and its solution.

8-2208-579 Community Resources and Youth

Resources for the healthy as well as the deviant child, in the family and neighborhood, in addition to services provided by public and private agencies; relevant federal and state legislation.

8-2208-580 The Sociology of Higher Education

3 sh

This course will introduce students to view the university, its structure, history, and place within society from a sociological perspective. The university will not only be examined as the "product of culture," the purveyor of tradition and of learning, but also as a focus for social mobility. The course will be taught from a cross-cultural perspective.

8-2208-603 Reading Seminar in Sociology

2 sh

Required for all master's candidates concentrating in sociology who elected to take a comprehensive examination. Candidates should register for the seminar in the semester preceding the examination date.

NON-DEGREE POST-BACCALAUREATE/POST M.A. APPROVED CERTIFICATION PROGRAMS

Chairman: Dr. Nicholas Michelli

Certification Advisor:

Counselor: Ms. Marcella P. West

I. Teacher Certification

This program enables a student with a baccalaureate degree to obtain a N.J. teaching certificate. Students planning to enter the teacher certification program must follow prescribed admission procedures and meet the general standards for admission established by the Graduate Council. In addition, the student must meet the separate criteria for admission into the teacher certification program, as follows:

1. Three favorable recommendations from individuals aware of applicant's scholastic aptitude and character.
2. Demonstration of competence in speech.
3. Cumulative average of at least 2.45 on a 4.00 scale.*
4. Evidence of active interest in community affairs and teaching.

The program is open to students with undergraduate background equivalent to a teaching field in one of these areas: fine arts, business education (bookkeeping and accounting, general business education, distributive education, secretarial studies), English, foreign languages (French, German, Latin, Spanish), home economics, industrial education and technology, mathematics, music, nursery school education, health and/or physical education, science, social sciences, speech and theater. (See also teaching areas listed on next page.)

Upon successful completion of the program, the student will be recommended to the N.J. Department of Education for a teaching certificate (i.e. initial teaching field, Learning Disabilities Teacher Consultant, or School Psychologist). Students interested in teaching outside of New Jersey should seek information from the appropriate state authorities. In general, however, requirements are similar.

Advisement

All general questions regarding certification, requests for specific information concerning procedure and courses applicable toward approved initial teacher certification programs available at Montclair State College, may be directed to one of the following: Ms. Marcella P. West, 893-4139 in the School of Education and Community Services or Ms. Simone C. Picard, 893-5147/8 in the Graduate Division.

Persons interested in the program may secure information from program advisors. Upon acceptance, a student will be assigned a School of Education counselor who will cooperatively develop a formal program of studies with a departmental (teaching field) advisor. Continuous advisement is available to students. For information about certification in New Jersey, the student may confer with the advisor for certification programs.

*Subject to higher departmental grade-point averages, depending upon teaching area (i.e., major discipline).

Teacher Certification Program Requirements

General Education

Academic background requires a minimum of forty-five semester hour credits in general education including study in at least four of the following areas: English, mathematics, science, social science, fine and practical arts, foreign languages, music and philosophy.

Professional Education

A.	Prerequisites	semester hours
	2001-101 General Psych. I - Human Growth & Development	3
	0829-410 Field Experience in Education	1-3
	(Speech Proficiency Requirements)	
	Details provided by Education Advisor	
	(Physiology/Hygiene Requirements)	
B.	Professional Sequence	semester hours
	Major Departmental Methods.	3
	0829-400 Teacher, School & Society.	3
	2001-200 Educational Psychology.	3
	0821-420 Philosophical Foundations of Education	3
	Education Elective (pending advisement).	3
	0829-411 Supervised Student Teaching or	8
	0829-414-5 In-Service Supervised Teaching	
	Co-requisite with all Student Teaching Experiences:	
	0829-401 Senior Field Experience and	1
	0829-402 Seminar in Professional Education	1
	0808-407 Developmental Reading I	1
	0808-408 Developmental Reading II.	1
C.	Teaching Field (Pending Departmental Advisement)	

Note:

- 1) The Field Experience in Education must be completed the semester prior to the semester in which Student Teaching is desired.
- 2) All applicants filing for admission to non-degree certification and/or M.A.T. programs must fulfill the course requirement in the HUMAN & INTERCULTURAL RELATIONS area as part of the approved programs for initial teacher certification. The course taken to fulfill this requirement must be selected from the approved list or its equivalent.

Teacher Certification Areas

- A. Business Education: General Business Studies and Accounting, General Business and Secretarial Studies, General Business and Distributive Education
- B. Communication Sciences and Disorders: Speech Correction, Deaf and Hard of Hearing, Teacher of the Handicapped
- C. English
- D. Fine Arts
- E. Foreign Languages (French, German, Latin, Spanish)
- F. Health and/or Physical Education

- G. Industrial Education and Technology: Industrial Education and Technology (academic background), Industrial Education and Technology (experience background), Vocational/Technical Education (undergraduate only, B.A. not required)
- H. Mathematics
- I. Music
- J. Nursery School Education-preschool, Kindergarten
- K. Science (Biology, Chemistry, Geoscience, Physics)
- L. Social Studies
- M. Speech and Theater

II. Advanced Certification (Post-Masters)

State certification is available in the following non-teaching educational specializations:

- A. Administration and Supervision: Supervisor, Principal, Superintendent
- B. Learning Disabilities Teacher Consultant
- C. Student Personnel Services
- D. Educational Media Specialist

III. Other Fields/Endorsements

Non-degree programs leading to State certification are available in the following areas:

- A. Bilingual
- B. Coordinator Industrial Education
- C. Reading
- D. School Business Administrator
- E. School Psychologist
- F. School Social Worker
- G. Teacher-Coordinator, Cooperative Vocational-Technical Education
- H. Teacher-Librarian/Associate Media Specialist
- I. TOESL (Teaching of English as a Second Language)

Supervised Student Teaching

Students who have been admitted to Teacher Education and who are eligible for Student Teaching must file application the semester prior to semester in which Student Teaching is desired. Application procedures must be completed by:

September 15 for Student Teaching in the Spring Semester

March 15 for Student Teaching in the Fall Semester

All appropriate department and professional education courses must be completed prior to filing application for Student Teaching. This normally would include 9-12 semester hours at Montclair State College including Methods in teaching field.

(**Note:** There is a combined Teacher Certification and Master of Arts in Teaching (MAT) Program available; information may be obtained by contacting the Graduate Division 892-5147 or School of Education and Community Services 893-5191).

Educational Placement

The Office of Student Teaching also offers an educational placement service. Students completing at least 12 credits at Montclair State College are eligible to register for

this service. Further information can be secured from Dr. Norman Lange, Director of Student Teaching and Educational Placement, and Mrs. Beverly McHugh, Associate Director, 893-4262.

Methods of Applying for Certification

The Registrar is the only College certifying agent. For detailed information about final evaluation procedures and methods of applying for certification, see General Information section of current Schedule of Courses book.

Other Professional Specialization

Non-degree programs designed to meet requirements for specialization established by professional associations are available in the following areas:

- A. American Dietetic Association
(Contact the graduate advisor, Department of Home Economics).
- B. Music Therapy
(Contact the chairperson, Department of Music).

GRADUATE FACULTY

SCHOOL OF EDUCATION

JOHN BARELL

Curriculum and Teaching
Ed.D., Columbia University

CATHERINE BECKER

Curriculum and Teaching
Ph.D., New York University

LAURENCE BELLAGAMBA

Educational Leadership
Ed.D., Columbia University

GEORGE BERNSTEIN

Educational Foundations
Ed.D., Columbia University

SUSIE BOYCE

Curriculum and Teaching
Ed.D., Rutgers University

MARY E. BREDEMEIER

Educational Foundations
Ed.D., Rutgers University

JOSEPH F. BRUNNER

Educational Leadership-Reading
Ed.D., University of Massachusetts

ANNE CASTENS

Educational Leadership
Ed.D., Rutgers University

FRANCESCO CORDASCO

Educational Foundations
Ed.D., New York University

WILLIAM A. CUFF

Educational Leadership
Ed.D., New York University

RAYMOND A. DISPOTO

Curriculum and Teaching
Ed.D., Rutgers University

JULIA DUTKA

Educational Leadership-Reading
Ed.D., Columbia University

SHEILA FAGES

Curriculum and Teaching
Ed.D., University of Miami

J. THOMAS FLAGG

Curriculum and Teaching
Ed.D., Rutgers University

ABRAHAM GELFOND

Counseling, Human Services,
Guidance
Ph.D., University of Michigan

ALFRED GORMAN

Counseling, Human Services,
Guidance
Ed.D., Columbia University

DONALD B. GREGG

Counseling, Human Services,
Guidance
Ed.D., Lehigh University

RICHARD GREY

Counseling, Human Services,
Guidance
Ed.D., Fordham University

THUNDER HASS

Educational Foundations
Ed.D., Rutgers University

LAWRENCE B. HAMEL

Counseling, Human Services,
Guidance
Ed.D., St. John's University

GEORGE D. HEISS

Educational Leadership-Research
and Evaluation
Ed.D., Rutgers University

ARLENE KING

Counseling, Human Services,
Guidance
Ph.D., Fordham University

GEORGE KING

Counseling, Human Services,
Guidance
Ed.D., Rutgers University

DANIEL KUNZ

Curriculum and Teaching
Ed.D., Rutgers University

GERHARD LANG

Educational Leadership-Research
and Evaluation
Ph.D., Columbia University

FRANK P. MERLO

Educational Leadership
Ed.D., Rutgers University

NICHOLAS MICHELLI

Curriculum and Teaching
Ed.D., Columbia University

THOMAS L. MILLARD

Counseling, Human Services,
Guidance
Ed.D. Fairleigh Dickinson University

WENDY OXMAN

Educational Leadership-Research
and Evaluation
Ph.D., Fordham University

ROBERT A. PINES

Curriculum and Teaching
Ed.D., University of Miami

GROSVENOR RUST

Educational Leadership-Media
Ph.D., University of Chicago

MARIA SCHANTZ

Educational Leadership-Reading
Ed.D., Columbia University

ANN M. SHARP

Educational Foundations
Ed.D., University of Massachusetts

JEAN TALLEY

Counseling, Human Services,
Guidance
Ph.D., Boston University

ANITA UHIA

Curriculum and Teaching
M.A., Montclair State College

JOSEPH E. VENTURINI

Curriculum and Teaching
Ed.D., Rutgers University

ERCELL I. WATSON

Educational Leadership
Ed.D., University of Pennsylvania
LL.D., Delaware State College

ROBERT B. WILLIAMS

Counseling Human Services,
Guidance
Ed.D., Rutgers University

DAVID WEISCHADLE

Educational Leadership
Ed.D., Rutgers University

ILENE YOUNG

Curriculum and Teaching
Ed.D., Columbia University

SCHOOL OF FINE AND PERFORMING ARTS

PETER BARNET

Fine Arts
Ed.D., New York University

SUSAN E. BARRIS

Fine Arts
M.A., Pratt Institute

MARDEN BATE

Voice
M.A., Columbia University

EDMUND BATTERSBY

Piano
M.M. Julliard School of Music

- JOSEPH BELLA
Costume Design
M.F.A., Catholic University of America
- WAYNE BOND
Speech
Ph.D., Southern Illinois University
- DON BUTTERFIELD
Tuba
Diploma, Julliard School of Music
- MAUREEN CARR
Music Theory
Ph.D., University of Wisconsin-Madison
- ANNE CHAPMAN
Fine Arts
M.F.A., Cranbrook Academy of Art
- CARMEN CICERO
Exhibiting Artist
B.A. Newark State College
- BRENDA MILLER COOPER
Voice
M.A., Columbia University
- JOHN CZERKOWICZ
Fine Arts
M.F.A., Rutgers University
- RAMON DELGADO
Theater
Ph.D., Southern Illinois University
- LEON DeLEEUW
Fine Arts
M.A., New York University
- DANNIS EATON
Speech
M.A., Columbia University
- JOHN GIRT
Music Theory; Composition
M.F.A., Carnegie Institute of Technology
- SUELLEN GLASSHAUSER
Fine Arts
M.F.A., University of California
- HOWARD GREENBLATT
Guitar
M.A., Hofstra University
- RUSSEL HAYTON
Organ
M.Mus., Union Theological Seminary
- LIDA HILTON
Fine Arts
M.F.A., Rutgers University
- TING HO
Music Theory; Composition
Ph.D., Eastman School of Music
- LEON HYMAN
Viola; Conducting
M.S. Julliard School of Music
- AVRAM KAMPF
Fine Arts
Ph.D., New School of Social Research
- RICHARD KYLE
Fine Arts
M.A., Columbia University
- JEROME LANDSMAN
Violin
D.M.A., University of Southern California
- PATRICIA LAY
Ceramics/Sculpture
M.F.A., Rochester Institute of Technology
- W. SCOTT MacCONNELL
Design/Technical Theater
M.A. Columbia University
- CHARLES H. MARTENS
Fine Arts
Ed.D., New York University
- WILLIAM C. McCREATH
Fine Arts
M.F.A., Cranbrook Academy of Art
- CLYDE W. McELROY
Theater
Ed.D., University of Virginia
- DONALD MINTZ
Musicology
Ph.D., Cornell University
- MARIO F. ONEGLIA
Trumpet; Music Education
Ed.D., Columbia University

ROSALIE R. PRATT

Harp; Music Education
Ed.D., Columbia University

MURRAY PRESENT

Piano
B.Mus., Michigan State University

DAVID RANDOLPH

Conducting; Music Literature
M.A., Columbia University

GERALD RATLIFF

Theater History
Ph.D., Bowling Green State University

OSCAR RAVINA

Violin; Viola
Diploma, Leningrad Conservatory

RUTH RENDLEMAN

Piano; Theory
M.M., Manhattan School of Music

JEROME ROCKWOOD

Theater
Ph.D., New York University

HELENE S. ROSS

Fine Arts
M.F.A., Temple University

PHILIP J. SABATELLI

Communication Theory
Ph.D., Temple University

JACK SACHER

Music History/Opera
Ed.D., Columbia University

KLAUS A. SCHNITZER

Fine Arts
M.F.A., Ohio University

GERARD SCHWARZ

Trumpet; Conducting
B.S., Julliard School of Music

ANN G. SEIDLER

Speech
Ph.D., New York University

WILLIAM SHADEL

Clarinet; Conducting
M.Mus., Manhattan School of Music

JONATHAN SILVER

Art History
M.A., Columbia University

MICHAEL SIPORIN

Fine Arts
M.F.A., Southern Illinois University

DONALD SOBOLIK

Speech and Theater
M.A., University of Nebraska

CHRISTOPHER STASHEFF

Broadcasting
Ph.D., University of Nebraska

WALTER SWALES

Fine Arts
M.F.A., Cranbrook Academy of Art

HOWARD TRAVIS

Broadcasting
Ph.D., University of Michigan

ALIDA WALSH

Fine Arts
M.A., San Diego State College

EMILY WATERS

Music Education
M.A., Montclair State College

JOHN WELDEN

Theater
Ph.D., Southern Illinois University

CAROL WESTFALL

Fine Arts
M.F.A., Maryland Institute

BARBARA WHEELER

Music Therapy
M.M. Florida State University

BENJAMIN F. WILKES

Voice
Ed.D., Columbia University

THOMAS WILT

Flute; Ethnomusicology
M. Music, University of Rochester

CHAIM ZEMACH

Violoncello
Diplomate of the Accademia Chigiana

VISITING SPECIALISTS IN MUSIC

LEONARD ARNER

Oboe

B.S., Columbia

KENNETH COOPER

Harpicord, Music History

Ph.D., Columbia University

LOREN GLICKMAN

Bassoon

B.A., Eastern School of Music

DONALD HARWOOD

Trombone

Sherwood School of Music

LAWRENCE JACOBS

Percussion

M.M., Julliard School of Music

DAVID LANGLITZ

Trombone

M.M., Julliard School of Music

CURTIS MACOMBER

Violin

D.M.A., Julliard School of Music

RONALD NASPO

String Bass

B.A., Montclair State College

RENEE SIEBERT

Flute

Diploma—Julliard School of Music

MARTIN SMITH

French Horn

M.S., Julliard School of Music

DANIEL TRIMBOLI

Saxophone

M.A., Columbia University

KATHLEEN WILBER

French Horn

M.M., Manhattan School of Music

KONRAD M. WOLFF

Piano

L.L.D., University of Berlin

M.A., Music, Columbia University

SCHOOL OF HUMANITIES

M. VICTOR ALPER

English

Ph.D., New York University

KENNETH AMAN

Philosophy and Religion

Ph.D., Yale University

SHAHLA ANAND

English

Ph.D., New York University

JEANNINS BARRET

English

Ph.D., New York University

THOMAS BENEDIKTSSON

English

Ph.D., University of Washington

DAVID BENFIELD

Philosophy and Religion

Ph.D., Brown University

VINCENZO BOLLETTINO

Spanish and Italian

Ph.D., Rutgers University

GEORGE BRANTL

Philosophy and Religion

Ph.D., Columbia University

BUTLER BREWTON

English

Ed.D., Rutgers University

THOMAS BRIDGES

Philosophy and Religion

Ph.D., Columbia University

MAURICE CAGNON

French
Ph.D., University of Pennsylvania

DAVID W.D. DICKSON

English
Ph.D., Harvard University
L.H.D., Bowdoin College

JOANNE ENGELBERT

Spanish
Ph.D., New York University

WOLFGANG B. FLEISCHMANN

Comparative Literature
Ph.D., University of North Carolina

EVA M. FLEISCHNER

Philosophy and Religion
Ph.D., Marquette University

ALICE FREED

Linguistics
Ph.D., University of Pennsylvania

NORMAN FULTON

Spanish and Italian
Ph.D., University of Madrid

ROBERT GLICK

French
Ph.D., University of Chicago

FRANK HANSON

English
Ph.D., Yale University

E. CLAIRE HEALEY

English
Ph.D., Columbia University

WALTER HEILBRONNER

German
Ph.D., University of Michigan

JOHNG E. HWANG

Spanish and Italian
Ph.D., University of Oregon

BARRY JACOBS

English
Ph.D., Harvard University

RITA D. JACOBS

English
Ph.D., University of Pennsylvania

STEPHEN JOHNSON

Philosophy and Religion
Ph.D., Yale University

DAVID KELLY

Classics
Ph.D., University of Pennsylvania

LEE KHANNA

English
Ph.D., Columbia University

HELENE KLIBBE

French
Ph.D., Syracuse University

LINDA LEVINE

Spanish and Italian
Ph.D., Harvard University

C. DANIEL LINDBLOM

German
Ph.D., Rutgers University

MATTHEW LIPMAN

Philosophy and Religion
Ph.D., Columbia University

ADELE McCOLLUM

Religion
Ph.D., Syracuse University

MORRIS McGEE

English
Ed.D., New York University

DAVID MERANZE

English
D.F.A., Yale University

ANNE MICKELSON

English
Ph.D., Rutgers University

ALYCE MILLER

English
Ph.D., Pennsylvania State University

ROBERT MILLER

Linguistics
Ph.D., University of Michigan

JOHN V. MOORE

German
Ph.D., Princeton University

JAMES NASH
English
Ph.D., University of Virginia

J. RAYMOND PAUL
English
M.A., Columbia University

GEORGE PETTY
English
Ph.D., New York University

PAOLO POSSIEDI
Spanish and Italian
Ph.D., University of Padua

THEODORE PRICE
English
Ph.D., Rutgers University

MURRAY PROSKY
English
Ph.D., University of Wisconsin

SANFORD RADNER
English
Ed.D., Columbia University

ANA RAMBALDO
Spanish and Italian
Ph.D., New York University

TIMOTHY RENNER
Classics
Ph.D., University of Michigan

MORTON D. RICH
English
Ph.D., New York University

THOMAS H. RICHARDSON
Education and Philosophy
Ed.D., Columbia University

LOUIS ROEDERER
French
Ph.D., New York University

ERNESTINE SCHLANT
German
Ph.D., Emory University

LAWRENCE SCHWARTZ
English
Ph.D., Rutgers University

DOUGLAS SCHWEGEL
English
Ph.D., University of Minnesota

MILTON S. SEEGMILLER
Linguistics
Ph.D., New York University

MADELEINE SÉRGENT
French
M.A., University of Colorado

KEITH SLOCUM
English
Ph.D., University of Pennsylvania

SHARON SPENCER
English
Ph.D., New York University

ENID STANDRING
French
Ph.D., New York University

WILLIAM L. STANTON
Philosophy
Ph.D., Princeton University

CAROLE STONE
English
Ph.D., Fordham University

ROBERT F. STREETMAN
Religion
Ph.D., Drew University

DAVID STUEHLER
English
Ph.D., New York University

LILLIAN SZKLARCZYK
French
Ph.D., University of Pennsylvania

KATHLEEN WILKINS
French
Ph.D., University of Southampton

JOHN ZAHNER
Spanish
Ph.D., University of Arizona

SCHOOL OF MATHEMATICS AND SCIENCE

JOSEPH F. BECKER
Chemistry
Ed.D., Columbia University

STANLEY H. BENTON, JR.
Mathematics
Ph.D., Tulane University

EDWARD BOYNO
Mathematics
Ph.D., Rutgers University

CARL E. BREDLAU
Mathematics
Ph.D., Rutgers University

WINCHUNG A. CHAI
Mathematics
Ph.D., Polytechnic
Institution of Brooklyn

LARRY D. CRIBBEN
Biology
Ph.D., Ohio University

ANDREW DEMETROPOULOS
Mathematics
Ph.D., Stevens Institute of Technology

ANN MARIE DiLORENZO
Biology
Ph.D., New York University

THOMAS DEVLIN
Mathematics
Ph.D., Catholic University of America

ANDREW GALLOPO
Chemistry
Ph.D., Brown University

ROBERT GARFUNKEL
Mathematics
M.A., Montclair State College

VLADIMIR GARIK
Chemistry
Ph.D., University of Connecticut

IRWIN H. GAWLEY
Chemistry
Ed.D., Columbia University

CHARLES L. HAMILTON
Geoscience
Ph.D., Virginia Polytechnic Institute

JOHN L. ISIDOR
Chemistry
Ph.D., University of North Carolina
Chapel Hill

KENNETH KALMANSON
Mathematics
Ph.D., City University of New York

ROSALYN KANE
Biology
M.S., New York University

MARC L. KASNER
Chemistry
Ph.D., Purdue University

PATRICIA C. KENSCHAFT
Mathematics
Ph.D., University of Pennsylvania

LEAH KODITSCHKE
Biology
Ph.D., Rutgers University

STEPHEN J. KOEPP
Biology
Ph.D., Northern Texas State University

LUDWIK KOWALSKI
Geoscience
Ph.D., L'Universite de Paris

S. MARIE KUHNEN
Biology
Ph.D., New York University

AUDREY J. LEEF
Mathematics
Ed.D., Rutgers University

RICHARD A. LYNDE
Chemistry
Ph.D., Iowa State University

MARK L. LYNDROP
Chemistry
Ph.D., Northwestern University

EVAN MALETSKY

Mathematics

Ph.D., New York University

HELEN MARCUS-ROBERTS

Mathematics

Ph.D., Johns Hopkins University

J. MICHAEL McCORMICK

Biology

Ph.D., Oregon State University

ANNA PAI

Biology

Ph.D., Yeshiva University

NANCY PAISLEY

Chemistry

Ph.D., University of Illinois

WILLIAM PARZYNSKI

Mathematics

Ph.D., Stevens Institute of Technology

ROBERT C. RAMSDELL

Geoscience

M.S., Rutgers University

M.A., Princeton University

LAWRENCE RUSSELL

Mathematics

Ph.D., Stevens Institute of Technology

JUDITH SHILLCOCK

Biology

Ph.D., Rutgers University

PAUL SHUBECK

Biology

Ph.D., Rutgers University

MAX SOBEL

Mathematics

Ph.D., Columbia University

ALVIN STEIN

Biology

Ph.D., City University of New York

JOHN G. STEVENS

Mathematics

Ph.D., New York University

RUTH STEWART

Mathematics

Ed.D., Rutgers University

JAMES H. STODDARD

Mathematics

Ph.D., University of Michigan

MICHAEL SURGAN

Biology

Ph.D., University of Massachusetts

JOHN V. THIRUVATHUKAL

Geoscience

Ph.D. Oregon State University

THOMAS E. WILLIAMSON, JR.

Mathematics

Ph.D., Rutgers University

KENNETH C. WOLFF

Mathematics

Ph.D., New York University

PHILIP W. ZIPSE

Mathematics

Ph.D., Rutgers University

SCHOOL OF PROFESSIONAL ARTS AND SCIENCES

REE K. ARNOLD

Physical Education

Ed.D., Columbia University

JOAN BERNSTEIN

Home Economics

Ed.D., Teachers College,

Columbia University

RUTH C. BLANCHE

Health Professions

Ed.D., Teachers College,

Columbia University

ARYEH BLUMBERG

Administrative Sciences

Ph.D., University of Chicago

- HARVEY BLUMBERG
Administrative Sciences
Ph.D., City University of New York
- ROBERT BROWNING
Industrial Education & Technology
Ed.D., Columbia University
- CHUAN-YU-CHEN
Administrative Sciences
Ph.D., New York University
- STEPHEN CYRUS, JR
Business Education
Ed.D., Temple University
- MICHAEL S. DAVIDSON
Health Professions
Ed.D., Teachers College,
Columbia University
- RALPH A. DIPIETRO
Administrative Sciences
Ph.D., New York University
- ARTHUR W. EARL
Industrial Education & Technology
Ed.D., Columbia University
- HOUSTON G. ELAM
Administrative Sciences
Ph.D., New York University
- JOAN C. FICKE
Health Professions
Ed.D., New York University
- M. ELAINE FLINT
Home Economics
Ph.D., Pennsylvania State University
- CHARLOTTE B. FRASCO
Home Economics
Ph.D., Rutgers University
- JOSEPH A. GRECO
Administrative Sciences
Ph.D., New York University
- MARTIN L. GREENWALD
Industrial Education & Technology
Ed.D., New York University
- KATHARINE B. HALL
Home Economics
Ph.D., Pennsylvania State University
- JOSEPH C. HECHT
Business & Distributive Education
Ed.D., New York University
- MAREK HESSEL
Administrative Sciences
Ph.D., New York University
- HARRY H. HOITSMA
Health Professions
Ed.D., New York University
- GEORGE A. HORN
Physical Education
Ed.D., New York University
- ERNEST A. KALLMAN
Administrative Sciences
Ph.D., CUNY
- FREDERICK J. KELLY
Administrative Sciences
Ph.D., Columbia University
- JOHN J. KIRK
School of Conservation
Ph.D., University of Michigan
- MICHAEL R. KOZAK
Industrial Education & Technology
Texas A & M
- LEONARD B. KRUK
Business & Distributive Education
Ed.D., Temple University
- GEORGE LaVIGNE
Recreation Professions
Ed.D., Columbia University
- BARBARA L. LITWORNIA
Home Economics
Ph.D., Rutgers University
- LEONARD LUCENKO
Physical Education
Ph.D., University of Utah
- ANN R. McCONNELL
Physical Education
Ed.D., Syracuse University
- WAYNE R. MILLER
Recreation Professions
Ph.D., University of Maryland

BYUNG K. MIN

Administrative Sciences
Ph.D., Pennsylvania State University

VIVIAN D. MORRIS

Home Economics
Ph.D., Peabody College

JEAN NAMIAS

Administrative Sciences
Ph.D., New York University

LOUIS C. NANASSY

Business & Distributive Education
Ed.D., Columbia University

JAMES NEELANKAVIL

Administrative Sciences
Ph.D., New York University

WAYNE NELSEN

Industrial Education & Technology
Ed.D., University of Northern Colorado

CATHY NORRIS

Home Economics
Ed.D., New York University

GEORGE OLSEN

Industrial Education & Technology
Ed.D., New York University

ALAN J. OPPENHEIM

Administrative Sciences
Ph.D., New York University

CATHERINE J. PASKERT

Health Professions
Ph.D., University of Utah

JOHN G. REDD

Health Professions
Ph.D., University of Michigan

GLEN REHORN

Industrial Education & Technology
Ed.D., Oklahoma State University

LEON REINHARTH

Administrative Sciences
Ph.D., City University of New York

ALBERT D. ROSSETTI

Business & Distributive Education
Ed.D., Rutgers University

JOAN SCHLEEDE

Physical Education
Ed.D., New York University

FRED C. SCHÜMM

Industrial Education & Technology
Ph.D., New York University

REZA SHAHROKH

Health Professions
Ph.D., Southern Illinois University

VIJAY TANEJA-JAISING HANI

Home Economics
Ph.D., Iowa State University

RICHARD W. TEWS

Physical Education
Ph.D., New York University

KAREN R. TODD

Home Economics
Ph.D., State University of Iowa

JOSEPH TOTH

Physical Education
Ed.D., Colorado State University

JOHN H. TURNER

Administrative Sciences
Ph.D., City University of New York

RAYMOND VAN BENSCHOTEN

Vocational-Technical Education
Ed.D., Rutgers University

HAZEL M. WACKER

Physical Education
Ed.D., New York University

VINCENT J. WALENCIK

Industrial Education & Technology
Ed.D., Rutgers University

ELMER E. WATERS

Administrative Sciences
Ph.D., City University of New York

SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

- | | |
|--|---|
| <p>DAVID N. ALLOWAY
Sociology
Ph.D., New York University</p> <p>EDWARD ARONOW
Psychology
Ph.D., Fordham University</p> <p>JOSPEH ATTANASIO
Communication Sciences & Disorders
Ph.D., New York University</p> <p>IRWIN BADIN
Psychology
Ph.D., New York University</p> <p>MAE BALABAN
Communication Sciences & Disorders
Ed.D., Columbia University</p> <p>HARRY BALFE, II
Political Science
J.D., Catholic University
M.A., American University</p> <p>ELAINE BARDEN
Communication Sciences & Disorders
Ph.D., Columbia University</p> <p>RICHARD J. BARKER
History
Ph.D., Duke University</p> <p>FREDERICKA BELL-BERTI
Communication Sciences & Disorders
Ph.D., City University of New York</p> <p>BERTRAND P. BOUCHER
Environmental, Urban, and
Geographic Sciences
M.A., University of Colorado</p> <p>JAMES BOYLAN
Anthropology
Ph.D., Wayne State University</p> <p>KENNETH BROOK
Anthropology
Ph.D., City University of New York</p> <p>MARTIN BROWN
Psychology
Ed.D., Rutgers University</p> | <p>LEONARD J. BUCHNER
Psychology
Ph.D., Columbia University</p> <p>G. CARACCILO
Communication Sciences & Disorders
Ed.D., Columbia University</p> <p>BARBARA CHASIN
Sociology
Ph.D., University of Iowa</p> <p>ROBERT A. CICERONE
Psychology
Ph.D., University of Maine</p> <p>DOROTHY CINQUEMANI
Anthropology
Ph.D., Columbia University</p> <p>PHILIP S. COHEN
History
Ph.D., New York University</p> <p>SURESH DESAI
Economics
Ph.D., University of California</p> <p>RICHARD D. DRAPER
Psychology
Ph.D., Purdue University</p> <p>WALTER R. DURYEA
Psychology
Ph.D., Florida State University</p> <p>HAROLD FLINT
Economics
Ph.D., Southern Illinois University</p> <p>MARCHA P. FLINT
Anthropology
Ph.D., City University of New York</p> <p>RICHARD FRANKE
Anthropology
Ph.D., Harvard University</p> <p>PETER FREUND
Sociology
Ph.D., New School for Social Research</p> |
|--|---|

- MARK J. FRIEDMAN
Psychology
Ph.D., Purdue University
- STEPHEN FRIEDMAN
Psychology
Ph.D., University of California
- MARGARITA GARCIA
Psychology
Ph.D., Columbia University
- MARILYN GONYO
Communication Sciences & Disorders
Ed.D., Rutgers University
- ROBERT GOODKIN
Psychology
Ph.D., Florida State University
- LAURA GORDON
Sociology
Ph.D., SUNY, Stony Brook
- BENJAMIN HADIS
Sociology
Ph.D., UCLA
- HERBERT J. HAUER
Psychology
Ph.D., New York University
- EDWARD J. HAUPT
Psychology
Ph.D., New York University
- WARREN HEISS
Communication Sciences & Disorders
Ed.D., Yeshiva University
- THERESE M. HERMAN
Psychology
Ph.D., New School for Social Research
- GILBERT HOURTOULE
Political Science
Ph.D., Penn State University
- EDWARD W. JOHNSON
Political Science
Ph.D., New York University
- JAMES KEENEN
History
Ed.D., Columbia University
- BYONG-SUH KIM
Sociology
Ph.D., Emory University
- HARRIET M. KLEIN
Anthropology
Ph.D., Columbia University
- MARK A. KOPPEL
Psychology
Ph.D., Northwestern University
- WALTER E. KOPS
History
M.A., Montclair State College
- DORIS R. KRAEMER
Psychology
Ph.D., Yeshiva University
- SYDNEY KRONISH
Economics
Ph.D., New School for Social Research
- JANE KRUMACHER
Psychology
Ed.D., New York University
- EDITH KURZWEIL
Sociology
Ph.D., New School for Social Research
- GILBERT LEIGHT
Communication Sciences & Disorders
Ph.D., Columbia University
- MOIRA K. LeMAY
Psychology
Ph.D., Penn State University
- JAY LIVINGSTON
Sociology
Ph.D., Harvard University
- PAUL LOCHER
Psychology
Ph.D., Penn State University
- GEORGE T. MARTIN
Sociology
Ph.D., University of Chicago
- MEREDITH E. MCGUIRE
Sociology
Ph.D., New School for Social Research

GEORGE T. MENAKE
Political Science
Ph.D., New York University

LOIS A. MORE
History
Ed.D., Columbia University

AGNES N. O'CONNELL
Psychology
Ph.D., Rutgers University

J. KENNETH OLENIK
History
Ph.D., Cornell University

DENNIS C. O'NEILL
Economics
Ph.D., University of Cincinnati

SHARON OSGOOD
Psychology
Ph.D., New School for
Social Research

PETER PASTOR
History
Ph.D., New York University

THOMAS B. PERERA
Psychology
Ph.D., Columbia University

SAMUEL PRATT
Sociology
Ph.D., University of Michigan

BERTHA B. QUINTANA
Anthropology
Ed.D., New York University

MARGARET REILLY-PETRONE
Economics
Ph.D., Fordham University

W. AUGUSTUS RENTSCH
Environmental, Urban and
Geographic Studies
Ph.D., University of Michigan

DAVID ROBERTSON
Environmental, Urban and
Geographic Studies
Ph.D., Rutgers University

GEORGE ROTTER
Psychology
Ph.D., New York University

HELEN E. ROYER
History
Ph.D., Penn State University

LEONARD RUBIN
Sociology
Ph.D., SUNY, Stony Brook

CHARITY RUNDEN
Psychology
Ph.D., Indiana University

MAURIE SACKS
Anthropology
Ph.D., Columbia University

NAOMI SCHIFF
Communication Sciences & Disorders
Ph.D., Columbia University

HAROLD M. SCHOLL
Communication Sciences & Disorders
Ed.D., Columbia University

TERRY D. SCHON
Communication Sciences & Disorders
Ph.D., Syracuse University

JERRY SCHWARTZ
Psychology
Ph.D., Yeshiva University

JOEL SCHWARTZ
History
Ph.D., University of Chicago

JEROME M. SEIDMAN
Psychology
Ph.D., New York University

JOHN SEYMOUR
Psychology
Ph.D., New York University

ABBIE F. SHAPIRO-SALNY
Psychology
Ed.D., Rutgers University

EDWARD SHULMAN
Communication Sciences & Disorders
Ph.D., State University of Iowa

ROLAND SIITER
Psychology
Ph.D., Purdue University

HARBANS SINGH
Environmental, Urban, and
Geographic Studies
Ph.D., Rutgers University

SERPIL SISI-KLEVEN
Economics
Ph.D., New York University

ROLF STERNBERG
Environmental, Urban, and
Geographic Studies
Ph.D., Syracuse University

IRA R. SUGARMAN
Psychology
Ph.D., Columbia University

ROBERT TAYLOR
Geography-Urban Studies
Ph.D., St. Louis University

DAVID J. TOWNSEND
Psychology
Ph.D., Wayne State University

RHODA UNGER
Psychology
Ph.D., Harvard University

CHARLES M.B. UTETE
Political Science
Ph.D., Carlton University

DANIEL E. WILLIAMS
Psychology
Ph.D., St. John's University

GERALD WOOLF
Communication Sciences & Disorders
Ph.D., New York University

PETER F. WORMS
Psychology
Ed.D., Rutgers University

LOUIS B. ZIMMER
History
Ph.D., New York University

Directory

Dept or Area/Chairman/Advisors

Adult Cont. Ed. *Ray Ast*
Biology Chairman: *Dr. Paul Shubeck*
Biology Advisor: *Dr. Leah Koditschek*
Business and Dist. Ed. Chairman: *Dr. Albert Rossetti*
Chemistry Chairman: *Dr. John Isidor*
Chemistry Advisor: *Dr. Joseph Becker*
Comm. Sci. & Disorders Chairman: *Dr. Terry Schon*
Comm. Sci. & Disorders Advisor: *Dr. Elaine Barden*
Comm. Sci. & Disorders Advisor: *Dr. Warren Heiss*
Comm. Sci. & Disorders Advisor: *Dr. Michael Lindenman*
Comm. Sci. & Disorders Advisor: *Dr. Edward Shulman*
Comm. Sci. & Disorders Advisor: *Dr. Gerald Woolf*
Counseling, Human Services, Guidance Chairman: *Dr. Richard Grey*
Graduate Advisor: *Dr. Richard Grey*
Curr. & Teaching Chairman: *Dr. Nicholas Michelli*
Grad Advisor: *Dr. Susie B. Boyce*
Certification Advisor:
M.A.T. Coordinator: *Dr. Catherine Becker*
Ed Foundations Chairman: *Dr. Thunder Haas*
Ed Leadership Chairman: *Dr. Anne C. Castens*

Grad Advisors

Ed Leadership: *Dr. Laurence Bellagamba*
Ed Leadership: *Dr. Anne Castens*
Ed Leadership: *Dr. Frank Merlo, Dr. David Weischadle*
Reading: *Dr. Joseph Brunner, Dr. Maria Schantz*
Research & Evaluation: *Dr. Gerhard Lang*
Media & Tech. in Ed.: *Dr. Grosvenor Rust*

Office	Telephone
Bond House	(201) 893-4355
V 252 A	4397
V 252 F	4396
C 301	4269
W 265	5108
W 345	5136
K 105	4232
K 112	4227
K 103	4231
K 108	4227
K 106	4227
K 115	4226
AA 318	5175
AA 318	5175
AA 218	5191
AA 214	5192
C 208	5148
AA 216	5191
AA 206	5171
AA 102	5161

AA101	5184
AA 102 (5161)	AA 105 (4427)
AA 104 (5161)	AA 105 (5184)
C 105 (4248)	C 105 C(4248)
AA 110	5184
C 118	4239

English Chairman: <i>Dr. Claire Healey</i>	G 407	4274
English Advisor: <i>Dr. James Nash</i>	G 458	5153
Environmental, Urban, and Geographic Studies Chairman: <i>Bertrand P. Boucher</i>	BB 308	5258
Environmental, Urban, and Geographic Studies Advisor: <i>Dr. David Robertson</i>	BB 309	4188
Fine Arts Chairman: <i>Dr. William McCreath</i>	L 110	4307
Fine Arts Advisor: <i>Dr. Peter Barnet</i>	L 219	4307
French Chairman: <i>Dr. Helene Kilbke</i>	G 420	4283
French Advisor: <i>Prof. Madeleine Sergent</i>	G 423	5143
Geoscience Chairman: <i>Prof. Richard Hodson</i>	W 252	4166
Geoscience Advisor: <i>Dr. Charles Hamilton</i>	V 254N	5129
Health Ed. Chairman/Advisor: <i>Dr. Harry Holtsma</i>	C 305	4154
Home Ec. Chairman/Advisor: <i>Dr. Katharine Hall</i>	F 111B	4171
Ind. Ed. & Tech Chairman: <i>Dr. George Olsen</i>	F 216	4161
Ind. Ed. & Tech Advisor: <i>Dr. Arthur Earl</i>	F 220	4165
Mathematics Chairman: <i>Prof. Robert Garfunkel</i>	W 271	5132
Mathematics Advisor: <i>Dr. Wm. Parzynski</i>	W 204	4263
Music Chairman: <i>Dr. Maureen Carr</i>	M 2	5228
Music Advisor: <i>Dr. Jack Sacher</i>	M 7	5231
Non-Degree Post BA/Post MA		
Certification Programs		
Chairman: <i>Dr. Nicholas Michelli</i>	AA 218	5191
Counselor: <i>Ms. Marcella West</i>	AA 005	4139
Phys Ed Chairman: <i>Dr. Hazel Wacker</i>	P	5253
Phys Ed Advisor: <i>Dr. Richard Tews</i>	P	5240
Psychology Chairman: <i>Dr. John Seymour</i>	BB 226	5201
Psychology Advisor: <i>Dr. Walter Duryea</i>	BB 232	4134
Psychology Advisor: <i>Dr. Paul Locher</i>	BB 401	5203
Psychology Advisor: <i>Dr. Charity Runden</i>	860 Valley Rd.	4336
Social Sciences Advisor: <i>Dr. Bertha Quintana (Anthro.)</i>	BB 219	4119
Social Sciences Advisor: <i>Dr. Suresh Desai (Ec.)</i>	BB 208	5255
Social Sciences Advisor: <i>Prof. Bertrand Boucher (Geol/Urb)</i>	BB 308	5258
Social Sciences Advisor: <i>Dr. Richard Barker (Hist)</i>	BB 213	5261
Social Sciences Advisor: <i>Dr. Lois More (Non West Cult)</i>	BB 217	5261
Social Sciences Advisor: <i>Dr. Edward Johnson (Pol. Sci)</i>	BB 326	4238
Social Sciences Advisor: <i>Dr. George Martin (Soc.)</i>	BB 312	4131
Spanish Chairman: <i>Dr. Norman Fulton</i>	G 416	4285
Spanish Advisor: <i>Dr. Robert McCormick</i>	G 446	5137
Special Education Coordinator: <i>Dr. Warren Heiss</i>	K 103	4231
Special Education Advisors: <i>Dr. Terry Schon (Deaf Audiology)</i>	K 108	4227
Special Education Advisor: <i>Dr. Harold Scholl (Handicapped)</i>	K 119-A	4231
Special Education Advisor: <i>Dr. Walter Duryea (Soc. & Emot. Hand.)</i>	BB 232	4134
Speech and Theater Chairman: <i>Dr. Wayne Bond</i>	A 100	4217
Speech and Theater Advisor: <i>Dr. Clyde McElroy</i>	K 102	4221

INDEX

- About the College 7
- About the Graduate Division 8
- Academic Facilities and Student Services 20-21
- Academic Policies and Regulations 13-14
 - Course Load 13
 - Course Numbering 13
 - Grades and Standards 14
 - Registration Procedure 14
 - Restrictions for Graduate Credit 13
 - Time Limit 13
 - Transfer Credit 13
- Acceptance Procedure 11
- Accreditation and Memberships 7
- Administration and Supervision Courses 49
- Admission to Graduate Study 10
 - Acceptance Procedure 11
 - Application 10
 - Deadlines 10
 - Deferred Matriculation 11
 - Foreign Applicants 12
 - General Requirements 10
 - Matriculation 11
 - Non-Degree Students 11
 - Termination of Acceptance 11
 - Undergraduate Seniors 12
 - Veterans 11
- Adult Continuing Education 22, 24-25
- Advisors for Graduate Students 203
- American Literature 83-84
- Anthropology 165, 171
- Application 10
 - Deadlines 10
- Application for Final Evaluation 15
- Audiology and the Hard of Hearing and the Deaf 140, 142
- Biology 9, 96-102
 - Admission Requirements 96
 - Requirements for the Master of Arts Degree in Biology 97
- British Literature 81
- Business Education and Office Systems
 - Administration 9, 117-121
 - Admission Requirements 117
 - Requirements for the Master of Arts Degree in Business Education and Office Systems Administration 117
- Career Services 20
- Chairmen 203
- Chemistry 9, 103-105
 - Admission Requirements 103
 - Requirements for the Master of Arts Degree in Chemistry 103
- Commencement 15
- Communication Sciences and Disorders 9, 140-150
 - Admission Requirements 140
 - Departmental Requirements 144
 - Post-Master's Certification Program in Learning Disabilities 144
 - Requirements for Certificate in Learning Disabilities 144
 - Requirements for Concentration in Teacher of the Socially and Emotionally Handicapped 144
 - Requirements for the Master of Arts Degree in Communication Sciences and Disorders 141
- Comparative Literature 84-85
- Comprehensive Examination 15
- Computer Science Concentration 111
- Counseling and Advisement 8
- Counseling, Drop-In Center 20
- Counseling, Human Sciences and Guidance 9, 26-34
 - Admission Requirements 26
 - Requirements for Certification 27
- Course Load 13
- Course Numbering 13
- Curriculum and Teaching 35-41
 - Admission Requirements 35
 - Advisement 35
 - Requirements for the Master of Arts Degree in Teaching 36
- Deadlines 10
- Dining Facilities 21
- Directory 203
- Distributive Education 120
- Doctoral Program in Educational Administration with a Major Emphasis in Community Education 23
- Economics 166, 173
- Educational Foundations 42-44
- Educational Leadership 9, 45-57




Advanced Graduate Study in	Grades and Standards	14
Administration and Supervision	Grading	14
Program Leading to the Reading	Graduate Faculty	189-202
Specialist Certificate	Graduate Programs and Fields of	
Requirements for the Master of Arts	Instruction	22-184
Degree in Administration and	Graduation Requirements	15
Supervision	Application for Final Evaluation	15
Requirements for the Master of Arts	Commencement	15
Degree in Reading	Comprehensive Examination	15
Educational Research and Evaluation	Program of Study	15
English and Comparative Literature	Thesis	15
Admission Requirements	Hard of Hearing and Deaf	142, 147
Requirements for the Master of Arts	Health Professions	9, 122-125
Degree in English and Comparative	Admission Requirements	122
Literature	Requirements for the Master of Arts	
Seminars and Thesis	Degree in Health Professions	122
English Education	Health Services	21
Environmental Studies	History	167, 175
Admission Requirements	History and Governance, College	7
Requirements for the Master of Arts	History and Organization, Graduate	
Degree in Environment Studies	Division	8
Examination	Home Economics	9, 126-129
Music	Admission Requirements	126
Faculty	Requirements for the Master of Arts	
School of Education	Degree in Home Economics	126
School of Fine and Performing	Housing	21
Arts	Human Sexuality	155
School of Humanities	I.D.'s	21
School of Mathematics and	Industrial Education and	
Science	Technology	9, 130-133
School of Professional Arts and	Admission Requirements	130
Sciences	Certification	131
School of Social and Behavioral	Requirements for the Master of Arts	
Sciences	Degree in Industrial Education and	
Fees	Technology	130
Final Evaluation	Insurance	21
Financial Assistance	Italian Courses	95
Fine Arts	Language and Learning Disorders	148
Admission Requirements	Learning Disabilities	142, 143
Requirements for the Master of Arts	Library	20
Degree in Fine Arts	Location of College	7
Foreign Applicants	Mathematics Education Concentration	111
French	Mathematics and Computer	
Admission Requirements	Science	9, 110-116
Requirements for the Master of Arts	Admission Requirements	110
Degree in French	Requirements for the Master of Arts	
General Requirements	Degree in Mathematics	110
Geography	Computer Science Concentration	111
Geoscience	Mathematics Education	
Admission Requirements	Concentration	111
Requirements for the Master of Arts	Pure and Applied Mathematics	
Degree in Geoscience	Concentration	110

Statistics Concentration	110	Reading Courses	52-54
Matriculation	11	Registration Procedure	14
Media Center	20	Restrictions for Graduate Credit	13
Music	9, 64-72	School of Educational and Community Services	9, 22-57, 189
Admission Requirements	64	School of Fine and Performing Arts	9, 58-78, 190
Applied Music Concentration	64	School of Humanities	9, 79-95, 193
Examinations	65	School of Mathematics and Science	9, 96-116, 195
Music Education Concentration	66	School of Professional Arts and Sciences	9, 117-138, 197
Performance Concentration	65	School of Social and Behavioral Sciences	9, 139-184, 199
Requirements for the Master of Arts Degree in Music	65	School Psychologist Certification	157
Theory/Composition Concentration	66	Social Sciences	9, 165-184
Non-Degree Post Baccalaureate/Post M.A. Approved Certification Programs	185-188	Admission Requirements	165
Advisement	185	Anthropology	165-171
Non-Degree Students	11	Economics	166, 173
Non-Western Cultures	160	Geography	166, 178
Parking	21	History	167, 175
Performance Concentration	65	Political Science	168, 180
Physical Education	9, 134-138	Sociology	169, 182
Admission Requirements	134	Urban Studies	170, 178
Requirements for the Master of Arts Degree in Physical Education	134-135	Sociology	169-182
Political Science	168, 180	Spanish	9, 92-95
Program Offerings	9	Admission Requirements	92
Program of Study	15	Peninsular Area	93
Psychologist Certification	157	Requirements for the Masters of Arts Degree in Spanish	92
Psychology	9, 164-174	Spanish American Area	94
Admission Requirements	154	Special Education	156
Requirements for the Master of Arts Degree in Psychology	157	Speech	74
Requirements for the Master of Arts Degree in Educational Psychology	155	Speech-Language Pathology	140, 142
Requirements for the Master of Arts Degree in Educational Psychology (Interrelated Graduate Program in Special Education and Special Pupil Services: Teacher of the Behaviorally Disturbed)	156	Speech Pathology	149
Requirements for the Master of Arts Degree in Educational Psychology (Specialization in Human Sexuality)	155	Speech and Theater	9, 73-78
Requirements for School Psychologist Certification	157	Admission Requirements	73
Public Media Arts	74	Public Media Arts Interdisciplinary Concentration	74
Pure and Applied Mathematics Concentration	110	Speech Concentration	74
		Theater Concentration	73
		Requirements for the Master of Arts Degree in Speech and Theater	73
		Statistics Concentration	110
		Student Identification	21
		Teacher Certification	185
		Areas	186
		Programs Requirements	186
		Technology in Education	56
		Theater	73
		Theory/Composition Concentration	66
		Thesis	15

Time Limit.	13	Tuition and Fees	19
Transfer Credit.	13	Urban Studies.	170, 178

A	Life Hall
A	Memorial A
A	School of F
C	College Hall
D	Gilbreth H
E	Temporary
F	Finley Hall
F	Industrial A
G	Partridge H
H	School of P
J	Student Ce
K	Speech Bu

- | | |
|----|---|
| L | Calista Five Arts Building |
| M | McEachern Music Building |
| P | Pianzer School Center—Gymnasium and
Swimming Pool |
| R | Drop-In Center |
| S | Sprague Library |
| V | Malloy Hall |
| W | School of Mathematics and Science |
| AA | Chapin Hall—School of Educational and
Community Services |
| BB | Russ Hall—School of Social and
Behavioral Science |
| CC | Freeman Hall Student Housing |
| DD | Stone Hall Student Housing |

-  Disabled Student Parking Only
-  Emergency Telephone
-  Shuttle Bus Stop



OFFICE OF ADMISSIONS
MONTCLAIR STATE COLLEGE
UPPER MONTCLAIR, N.J. 07043

Non-Profit Organization
U.S. Postage



Selma Harris
Montclair State College
Sprague Library

RETURN REQUESTED

5876



MONTCLAIR STATE UNIVERSITY



3 3000 01007 208 1

465471355

REF LD 3780 .N3 A14

Montclair State College
graduate bulletins



